

FIGURE 1

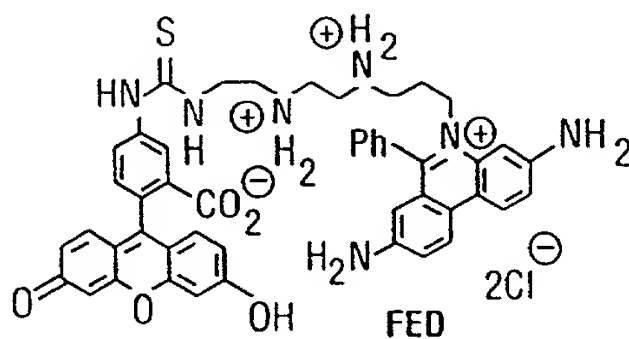
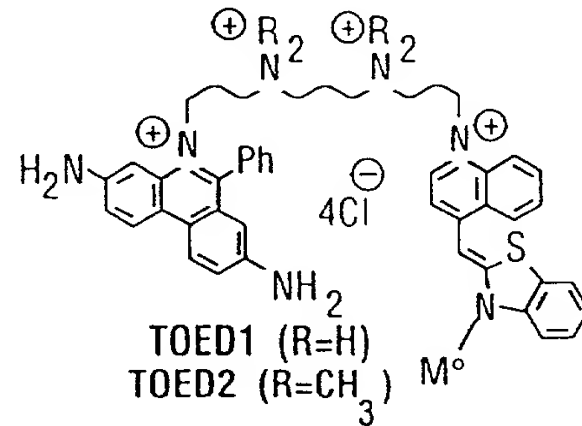
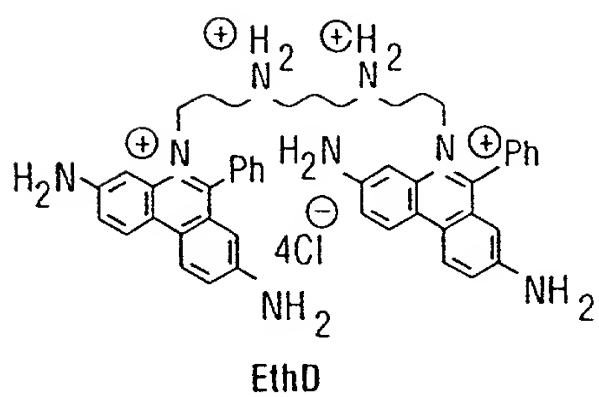
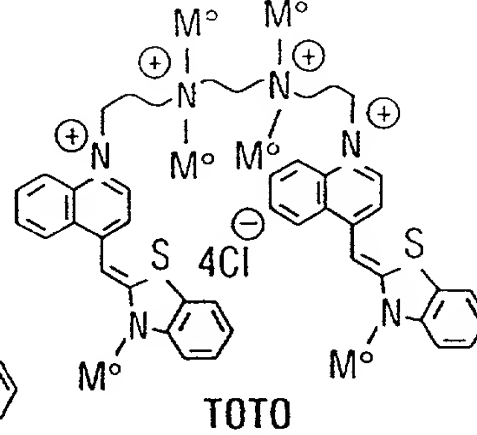
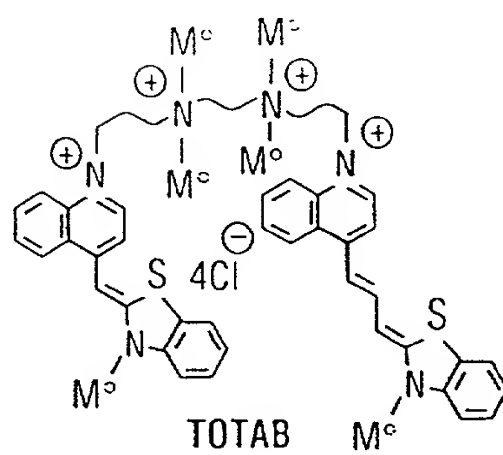
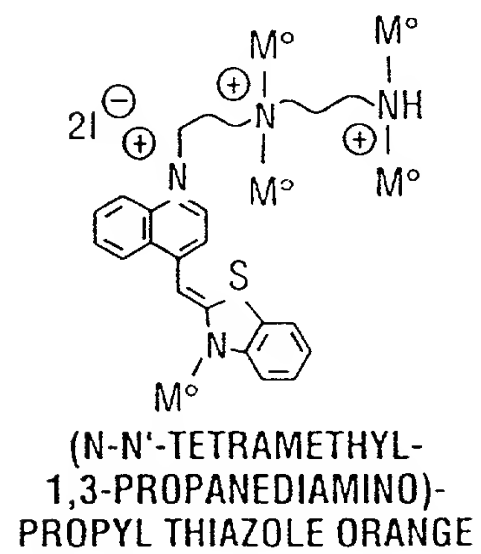
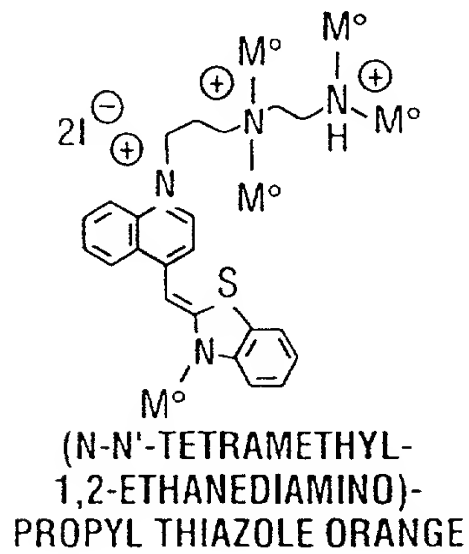
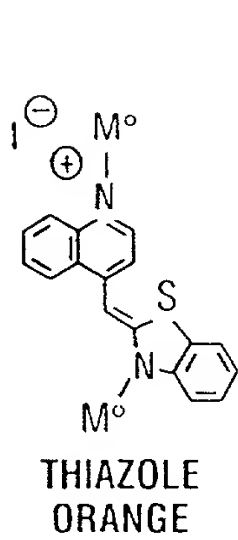
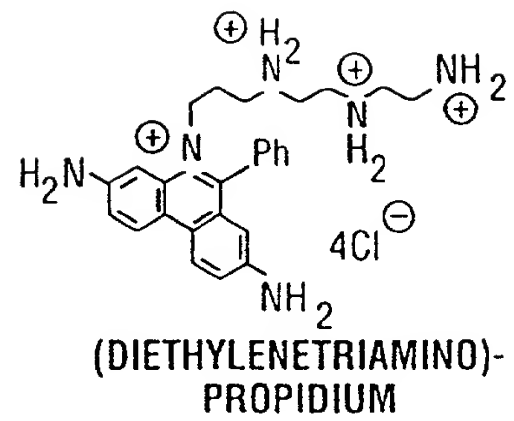
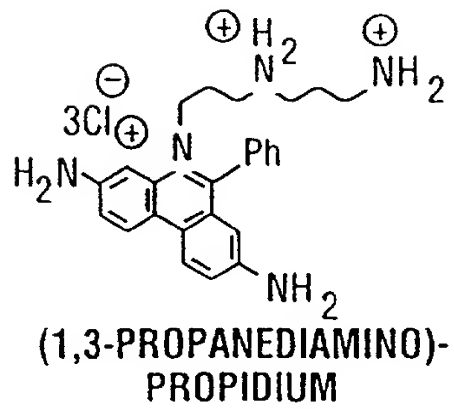
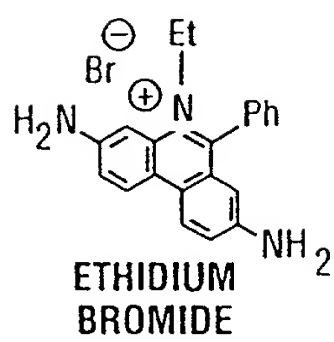


FIGURE 2

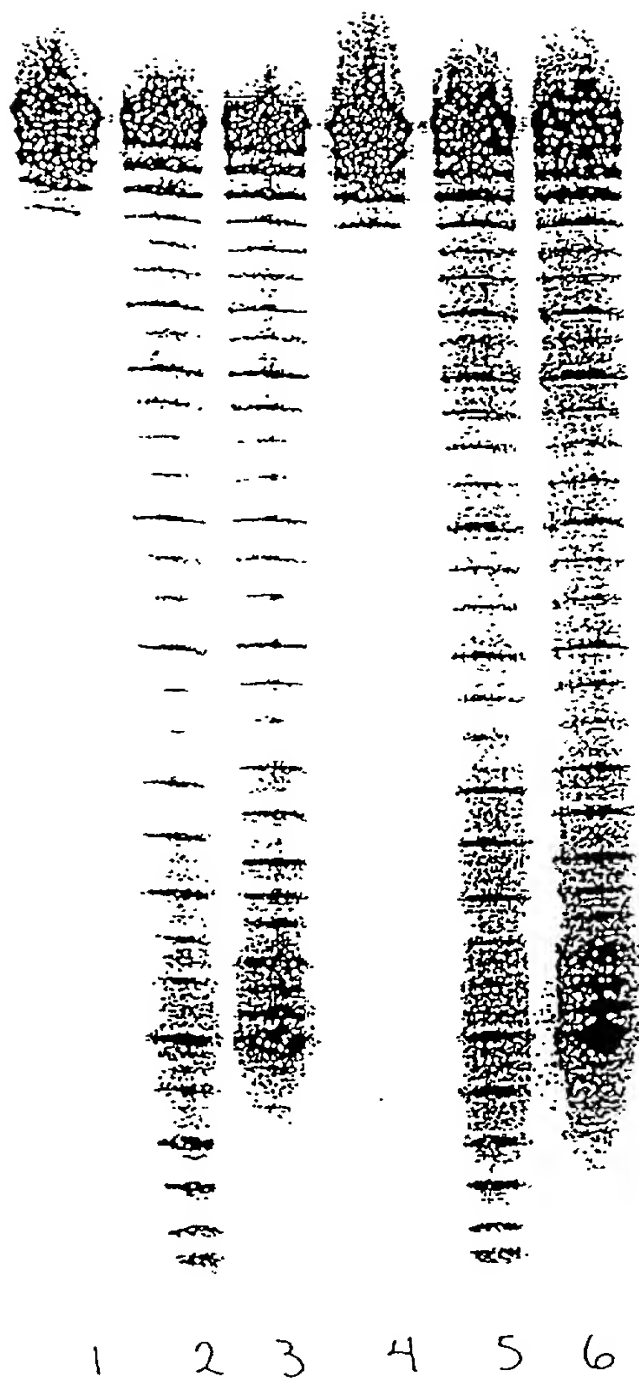
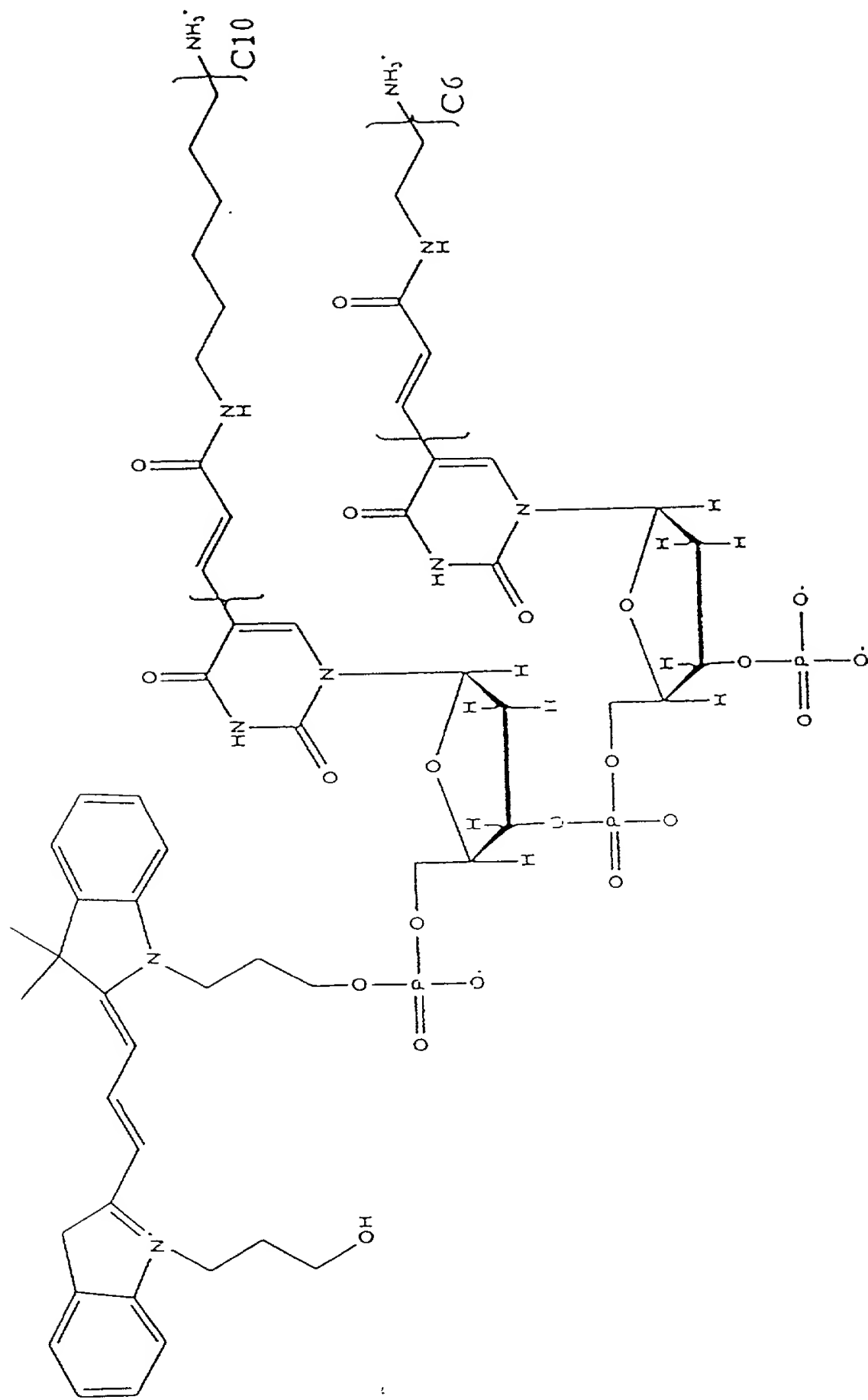


FIGURE 3

70 (C10 amino T's)

74 (C6 amino T's)



96/6

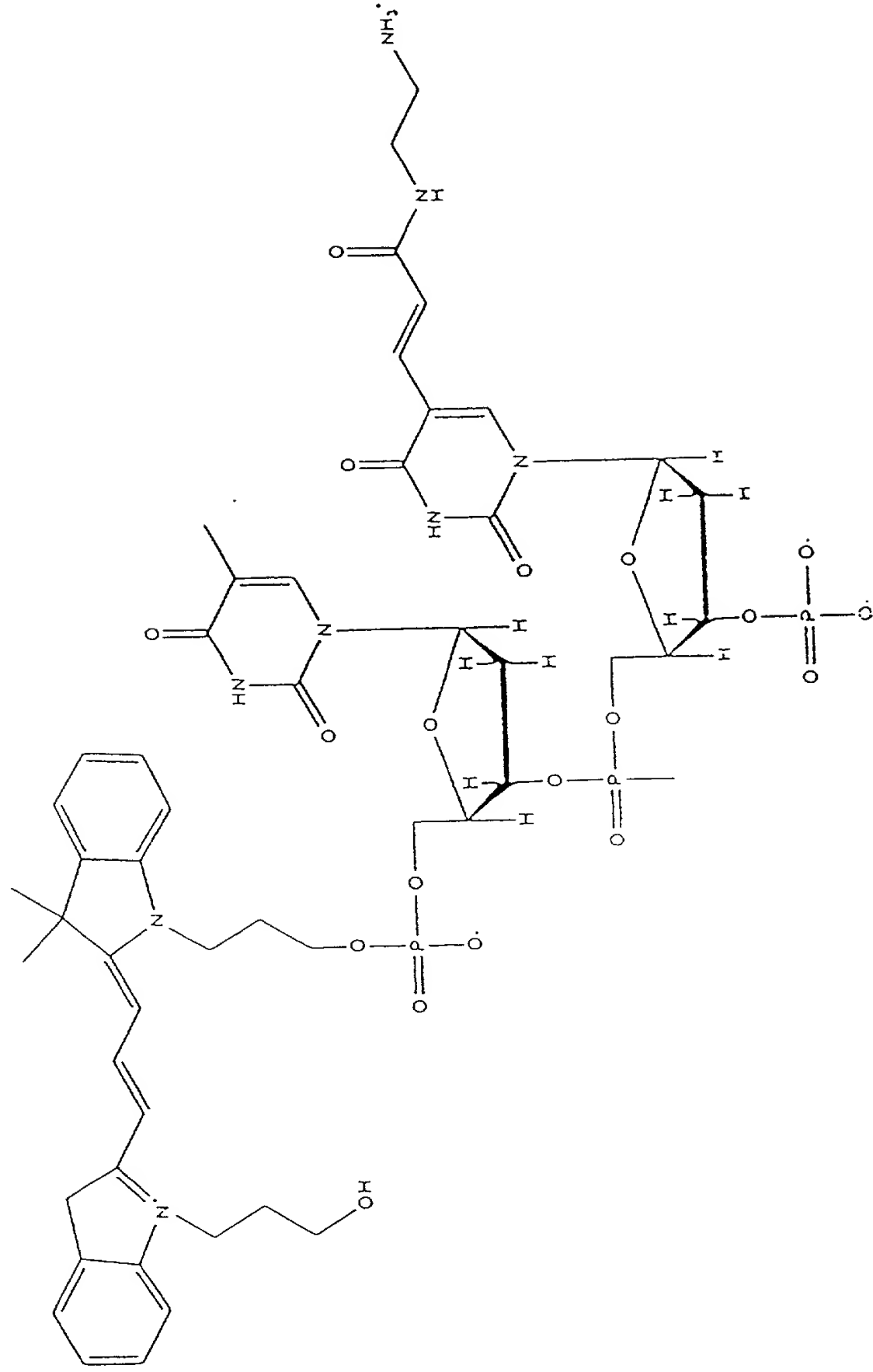


FIGURE 4a

5/46

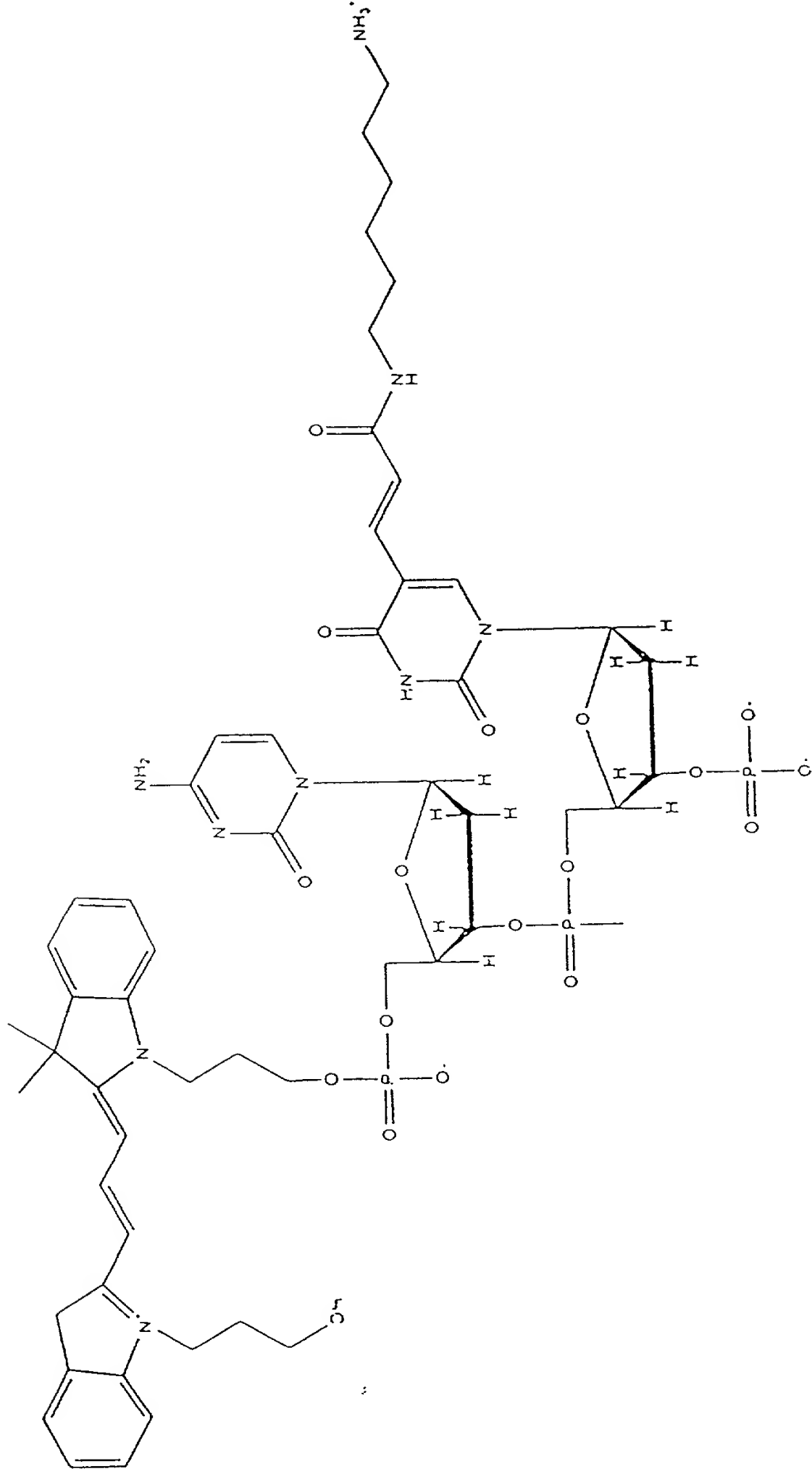


FIGURE 4b

96

FIGURE 5

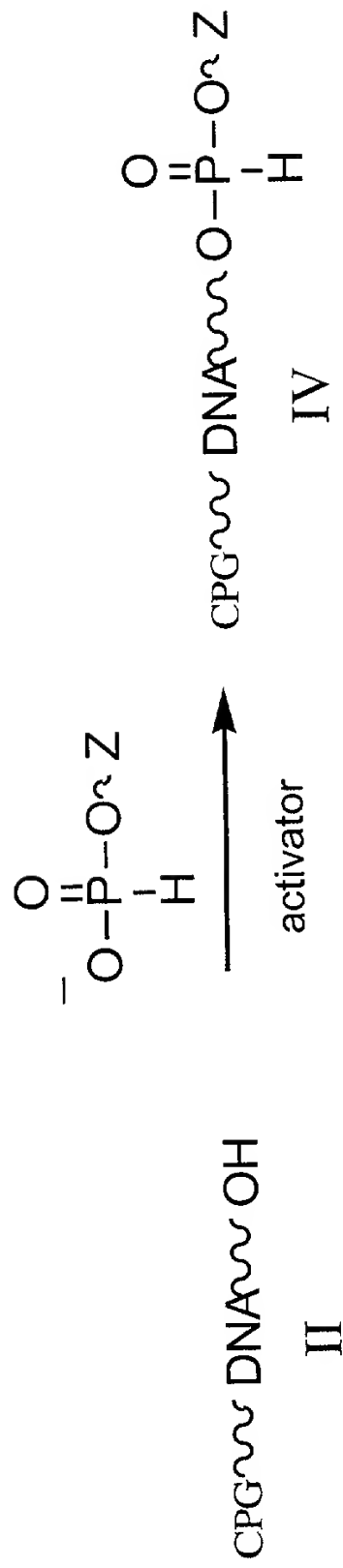
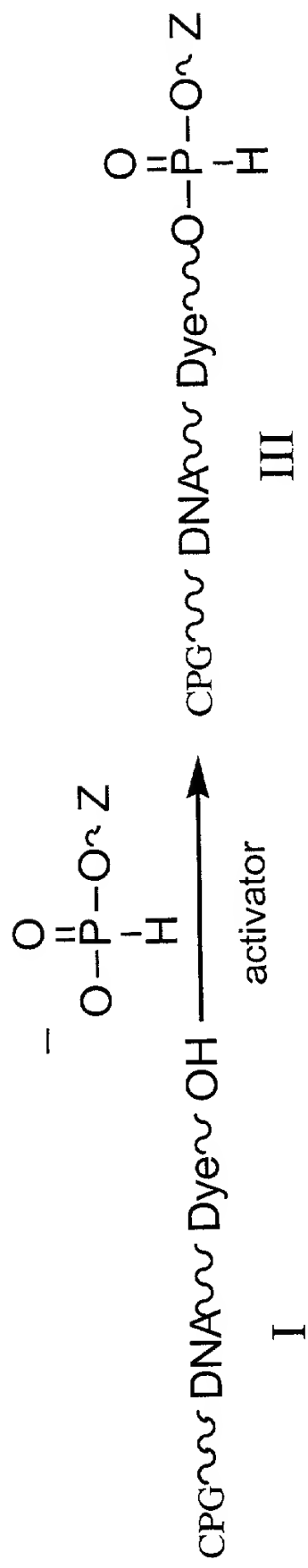
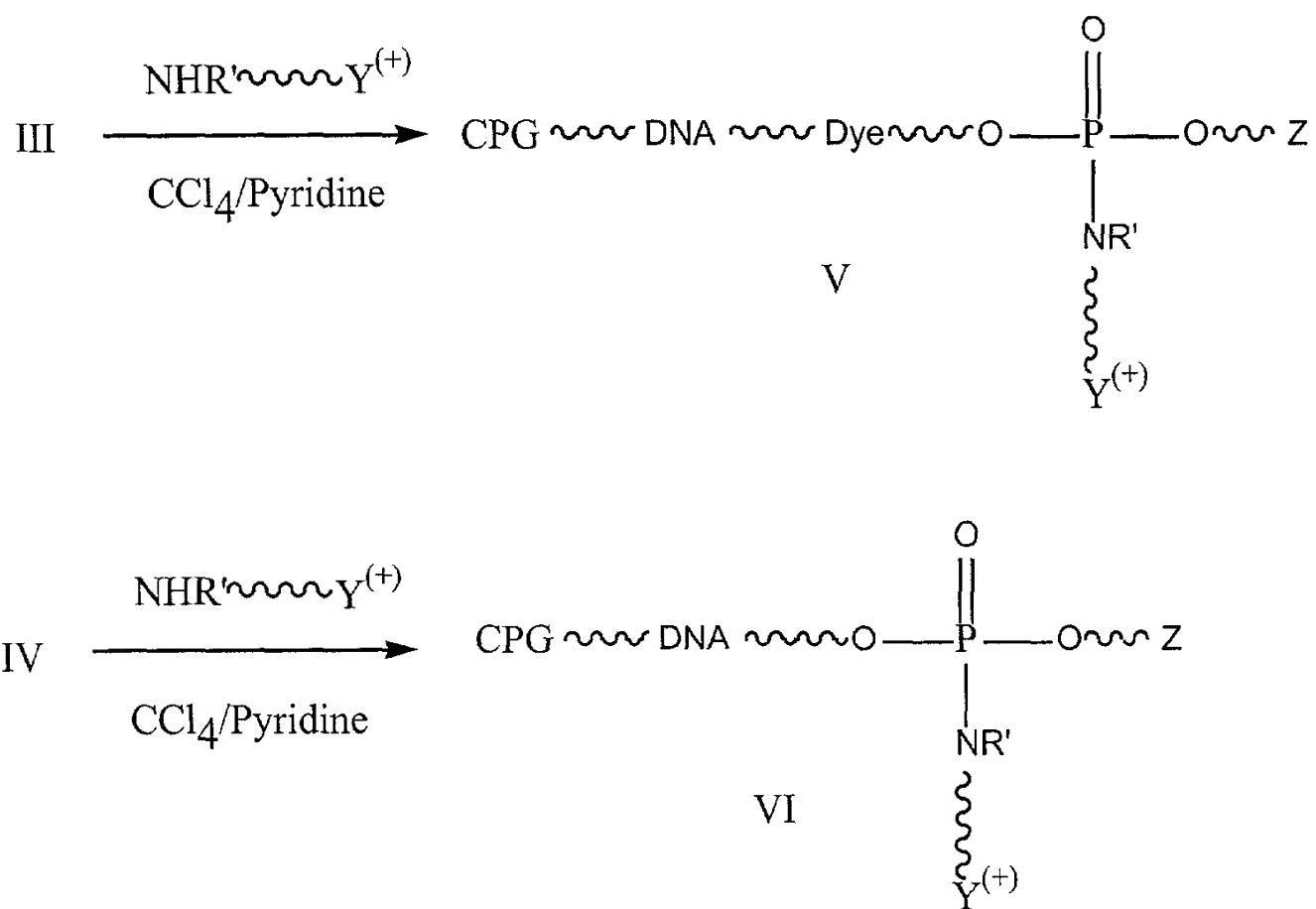


FIGURE 6



Y⁽⁺⁾ = organic group capable to introduce positive charge

FIGURE 7

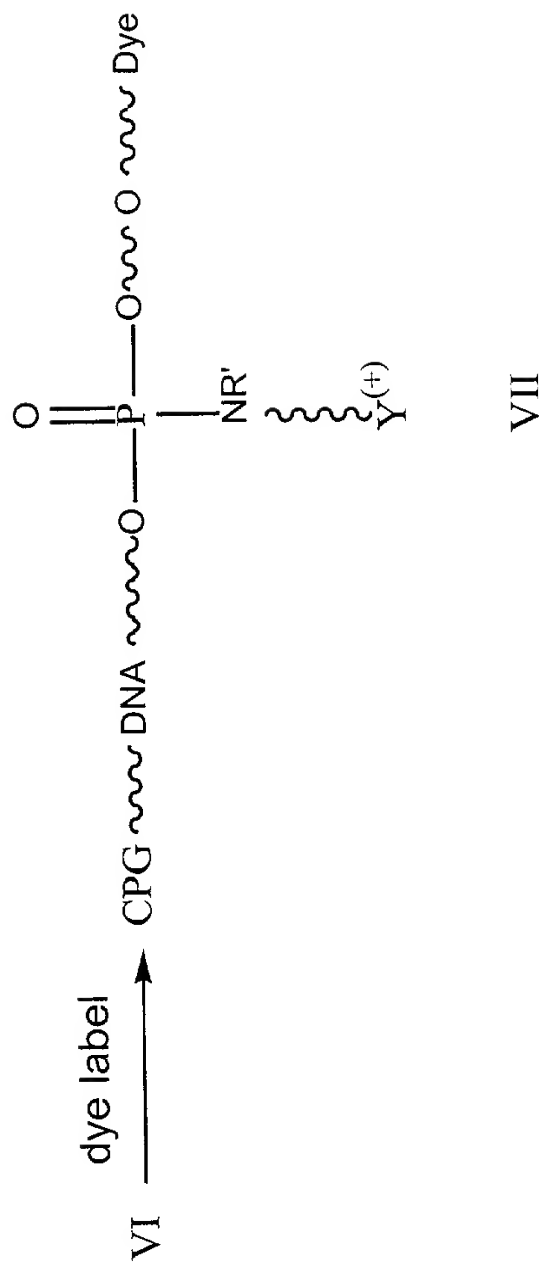
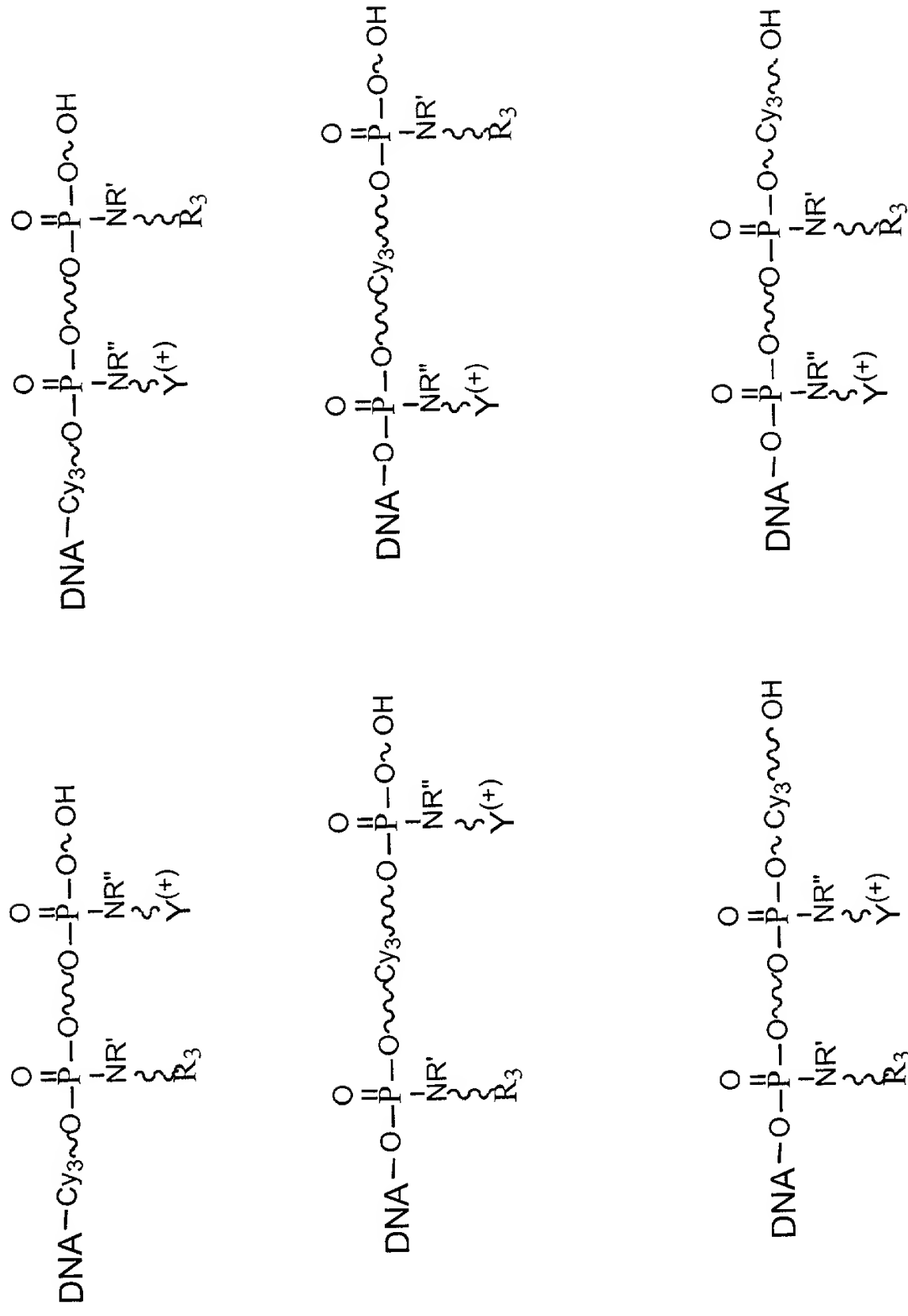


FIGURE 8



R', R'', R3 = H, alkyl, aryl

FIGURE 9

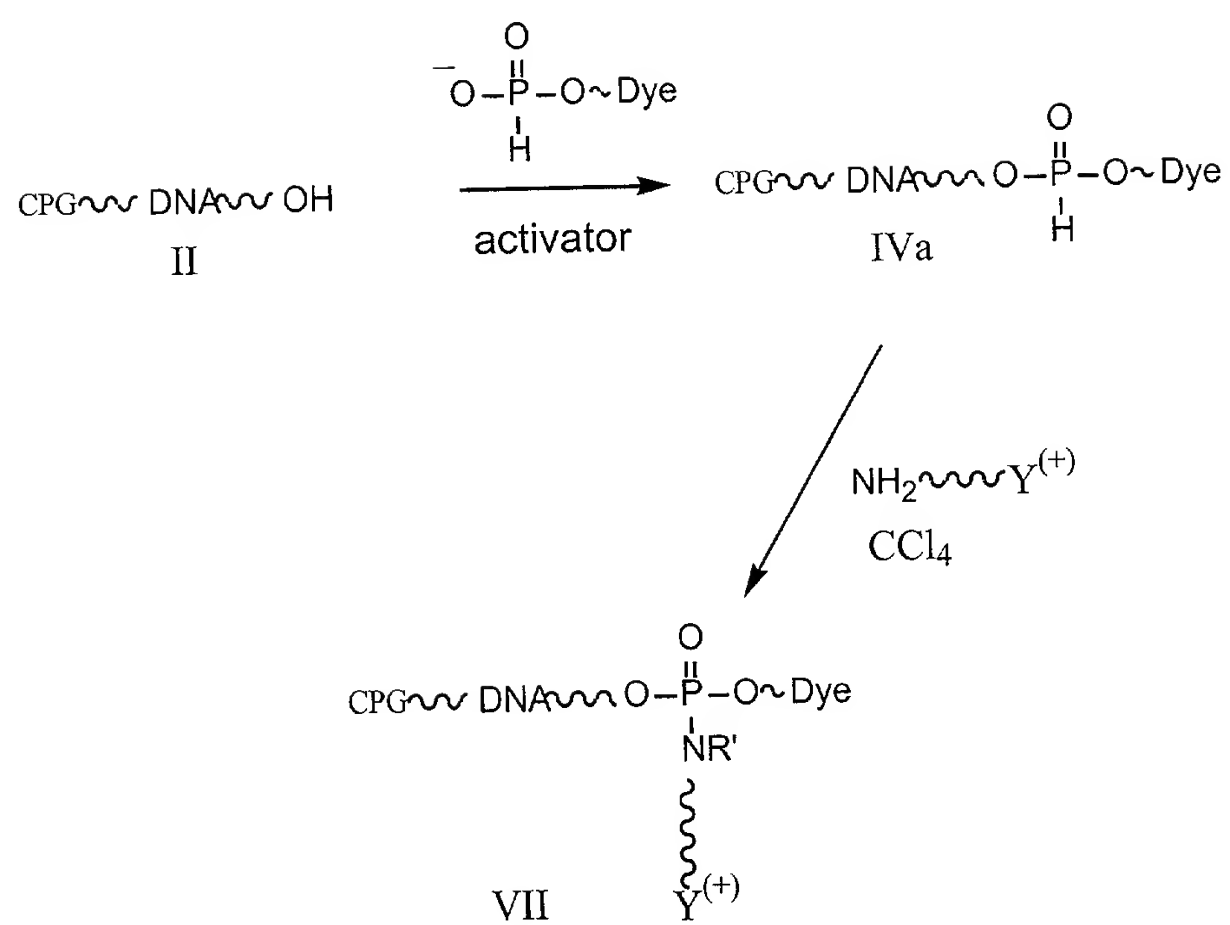


FIGURE 10

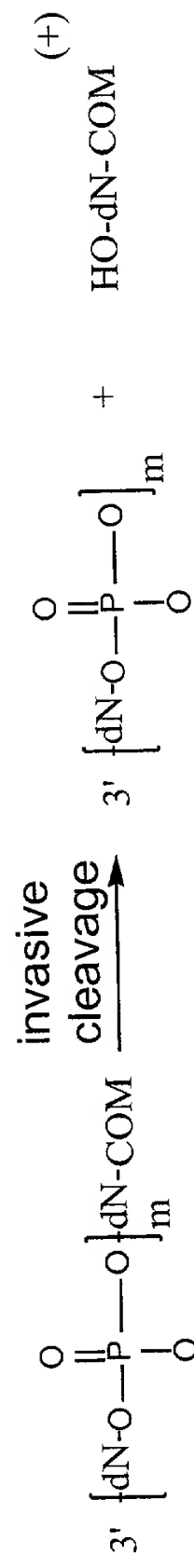
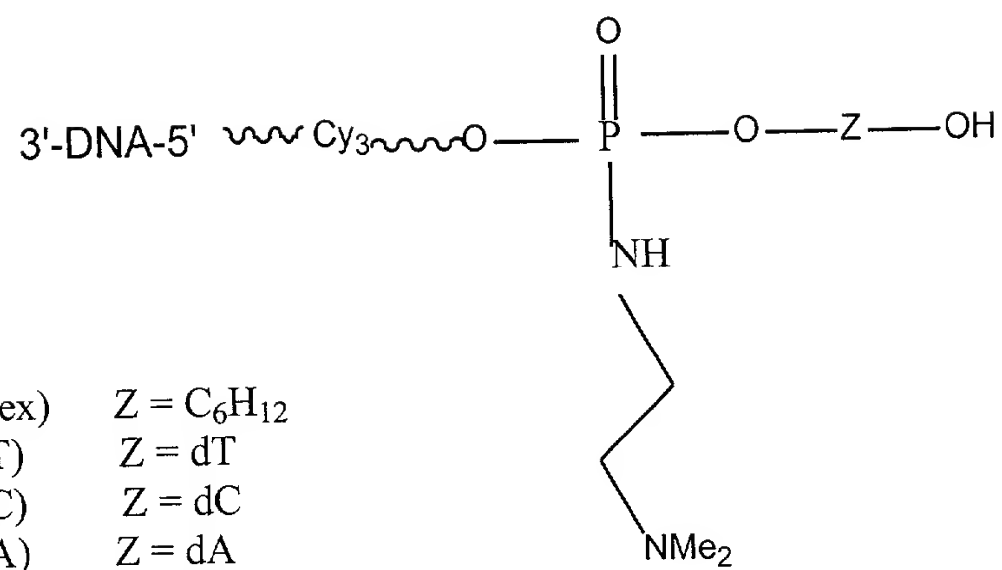
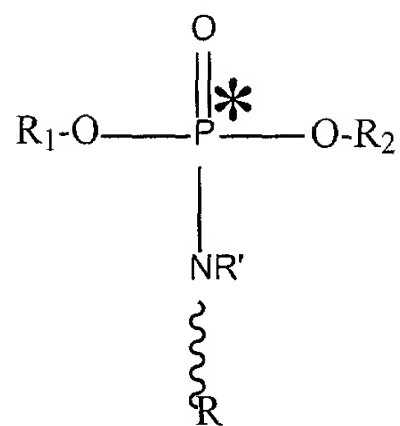


FIGURE 11



V-(Hex)	Z = C ₆ H ₁₂
V-(dT)	Z = dT
V-(dC)	Z = dC
V-(dA)	Z = dA
V-(dG)	Z = dG

FIGURE 12



chiral phosphoramidate phosphorus atom

9/14/1

FIGURE 13

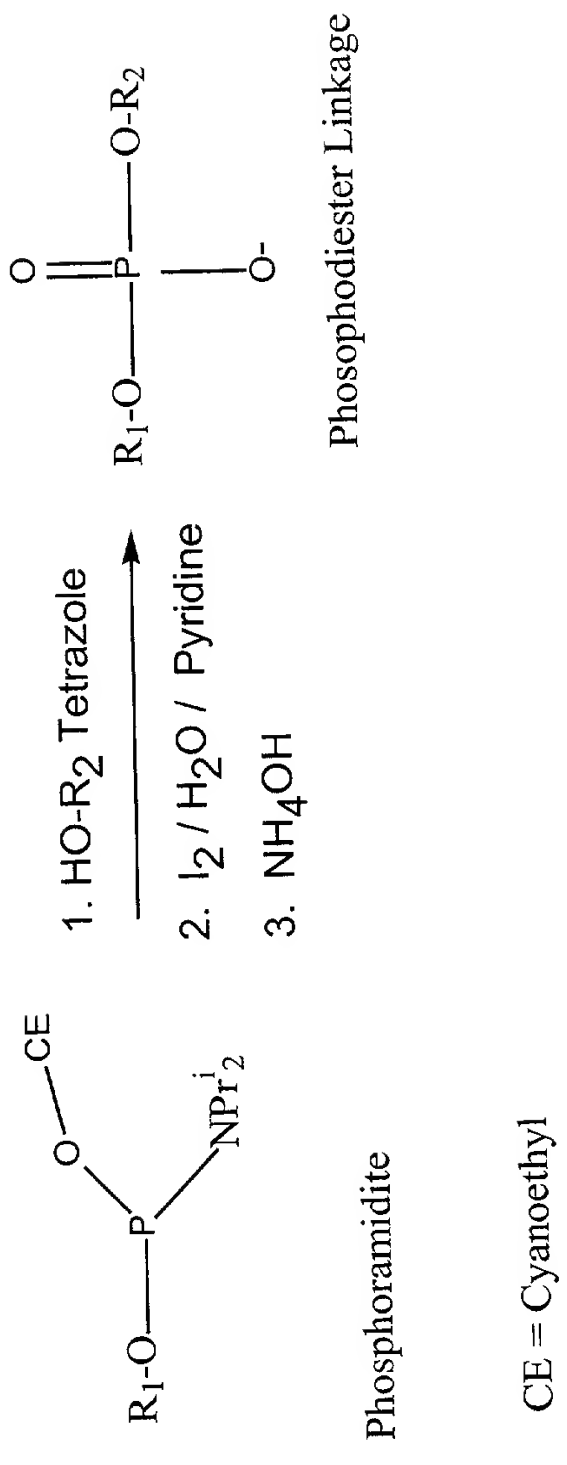
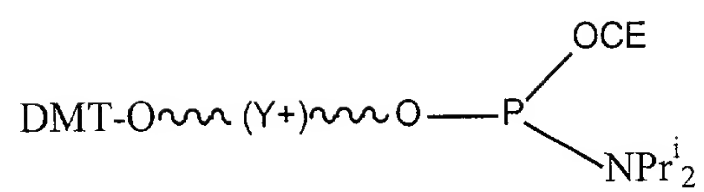


FIGURE 14

A.



B.

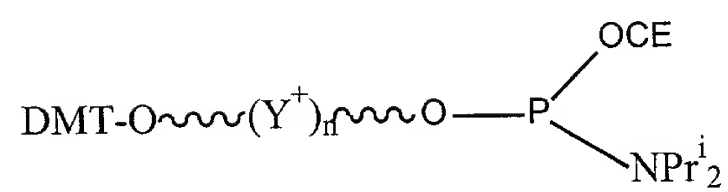


FIGURE 15

- A.

(0) (+1)

3'-DNA - (DP) - (PCP)
- B.

(0) (0) (+1)

3'-DNA - (DP) - (NP)_n - (PCP)
- C.

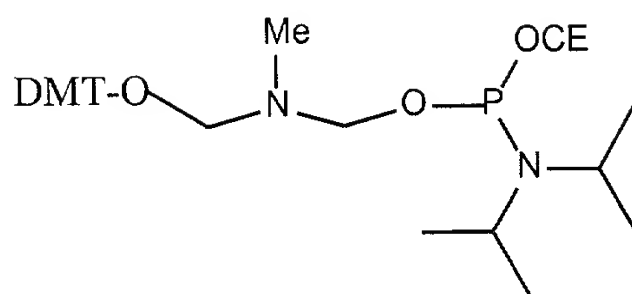
(0) (-1) (+1)

3'-DNA - (DP) - (PBB)_n - (PCP)_(n+1)
- D.

(0) (-1) (+1) (0)

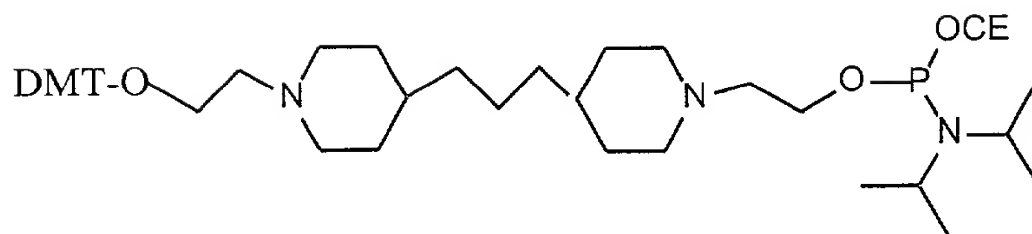
3'-DNA - (DP) - (PBB)_n - (PCP)_(n+1) - (NP)_m

FIGURE 16



Neutral Phosphoramidite

Net Charge : 0



Positively Charged Phosphoramidite

Net Charge : +1

FIGURE 17

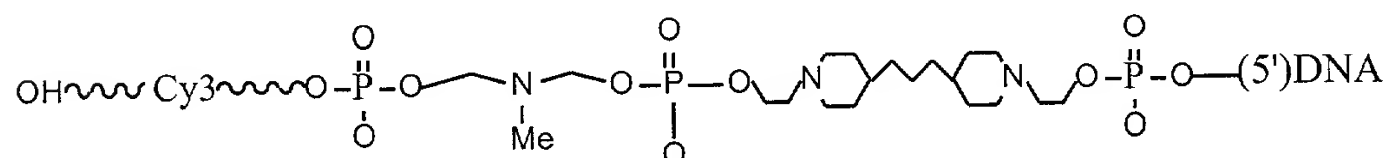
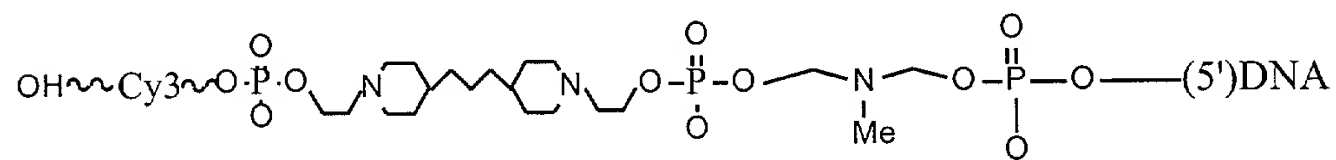
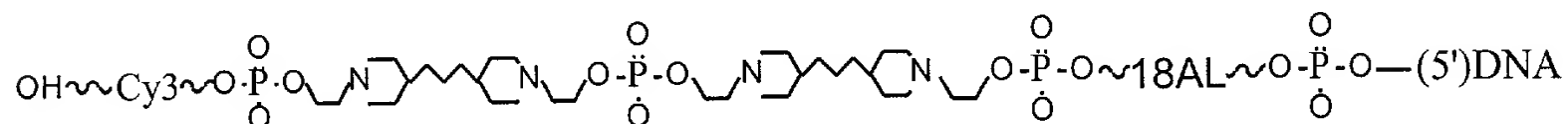
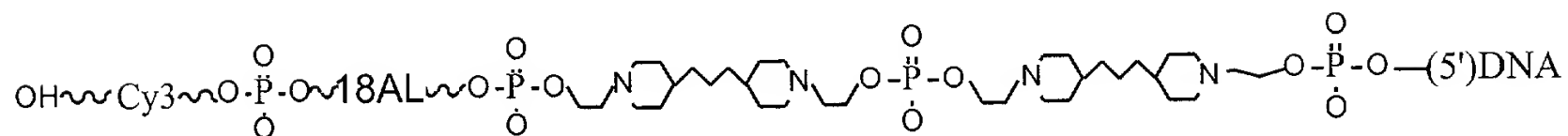
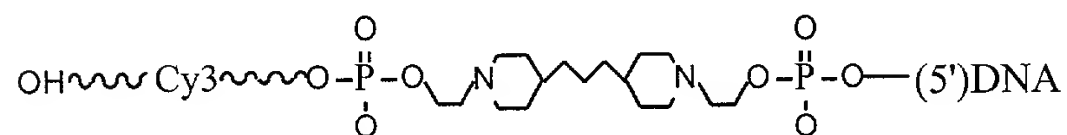
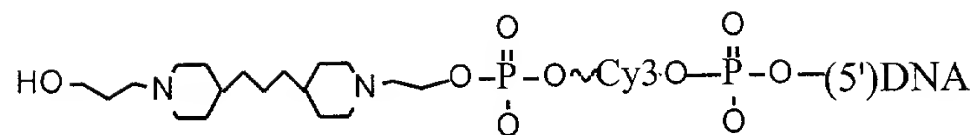


FIGURE 18

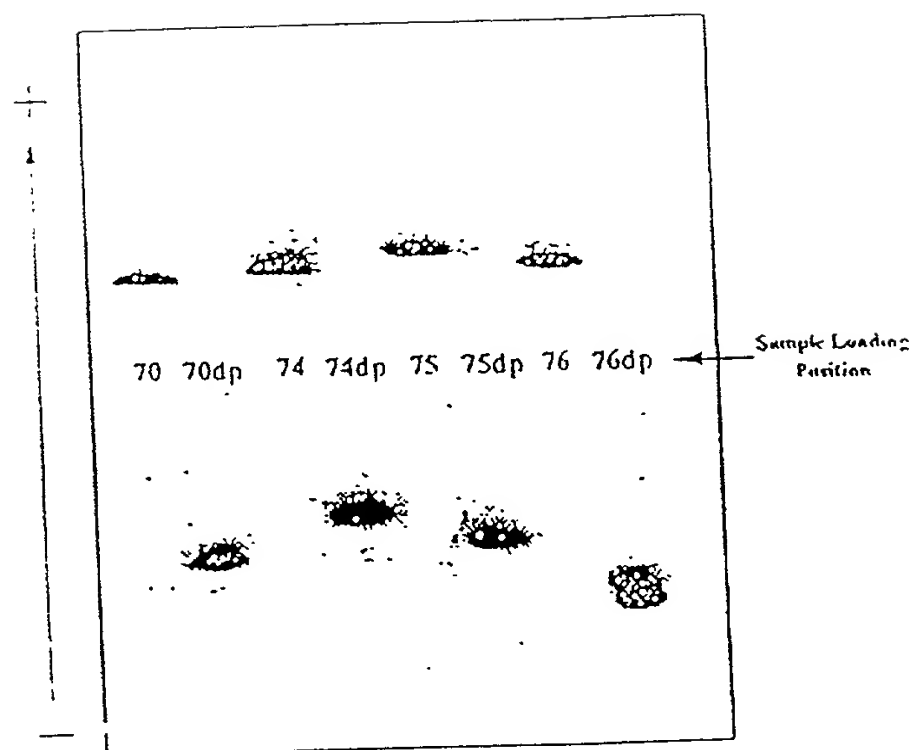
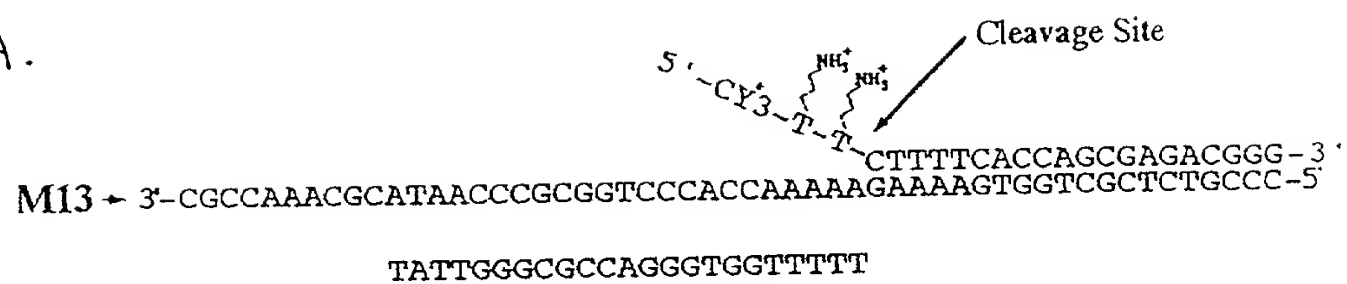


FIGURE 19

A.



B.

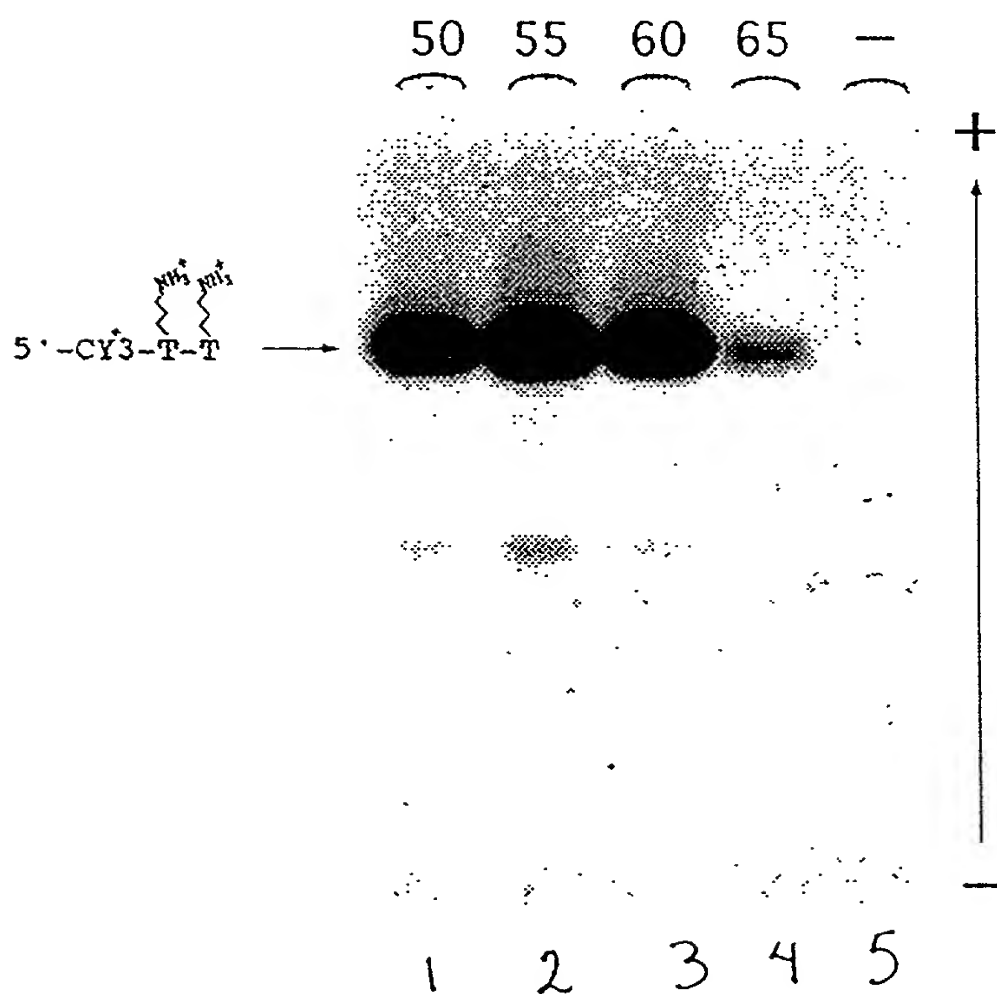


FIGURE 20

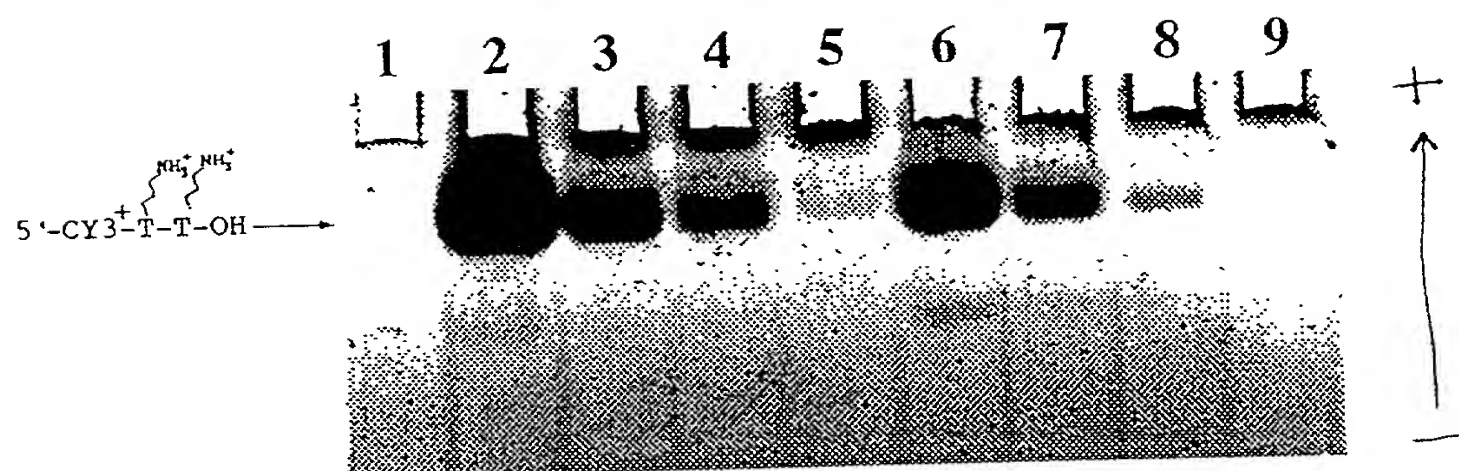
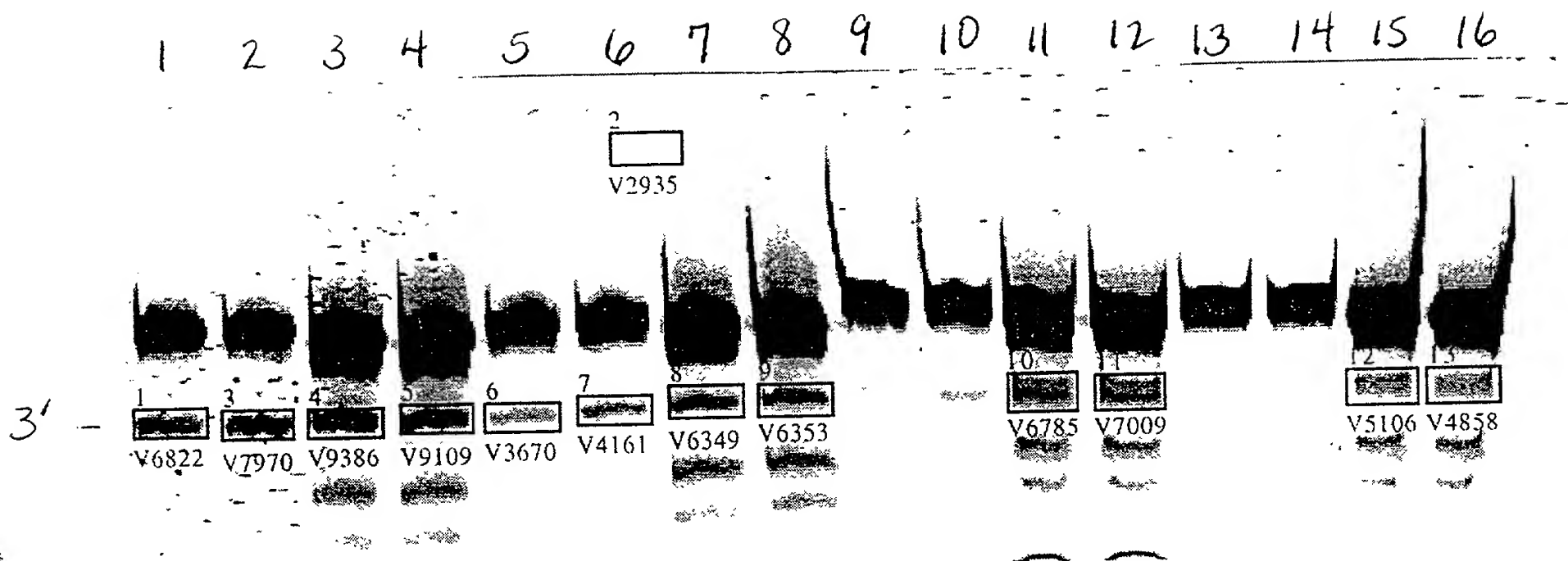


FIGURE 21

A



B

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

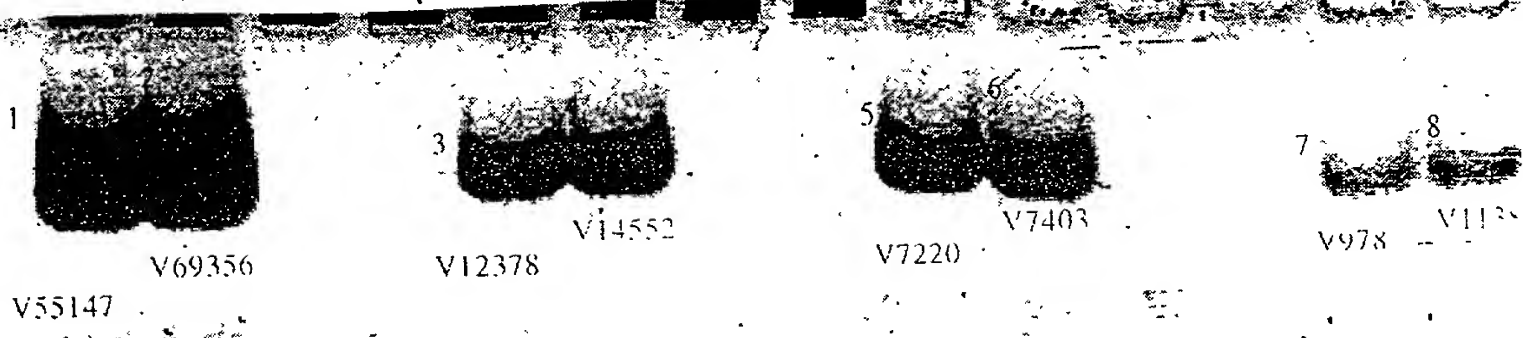


FIGURE 22

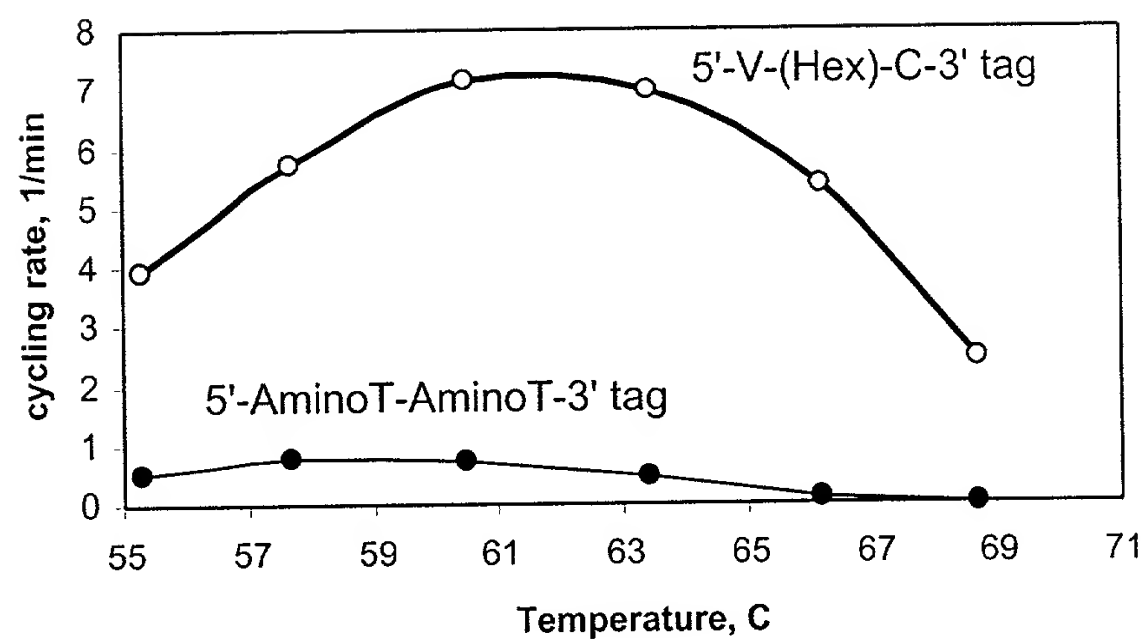
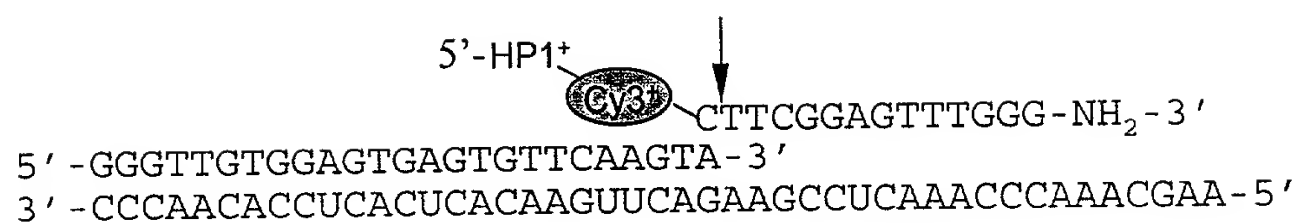
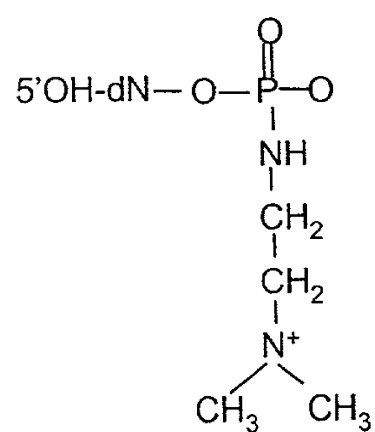


FIGURE 23

A.

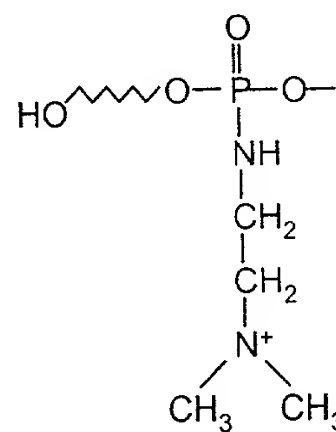


B.



V(dN)

804-41



V(HEX)

FIGURE 24A

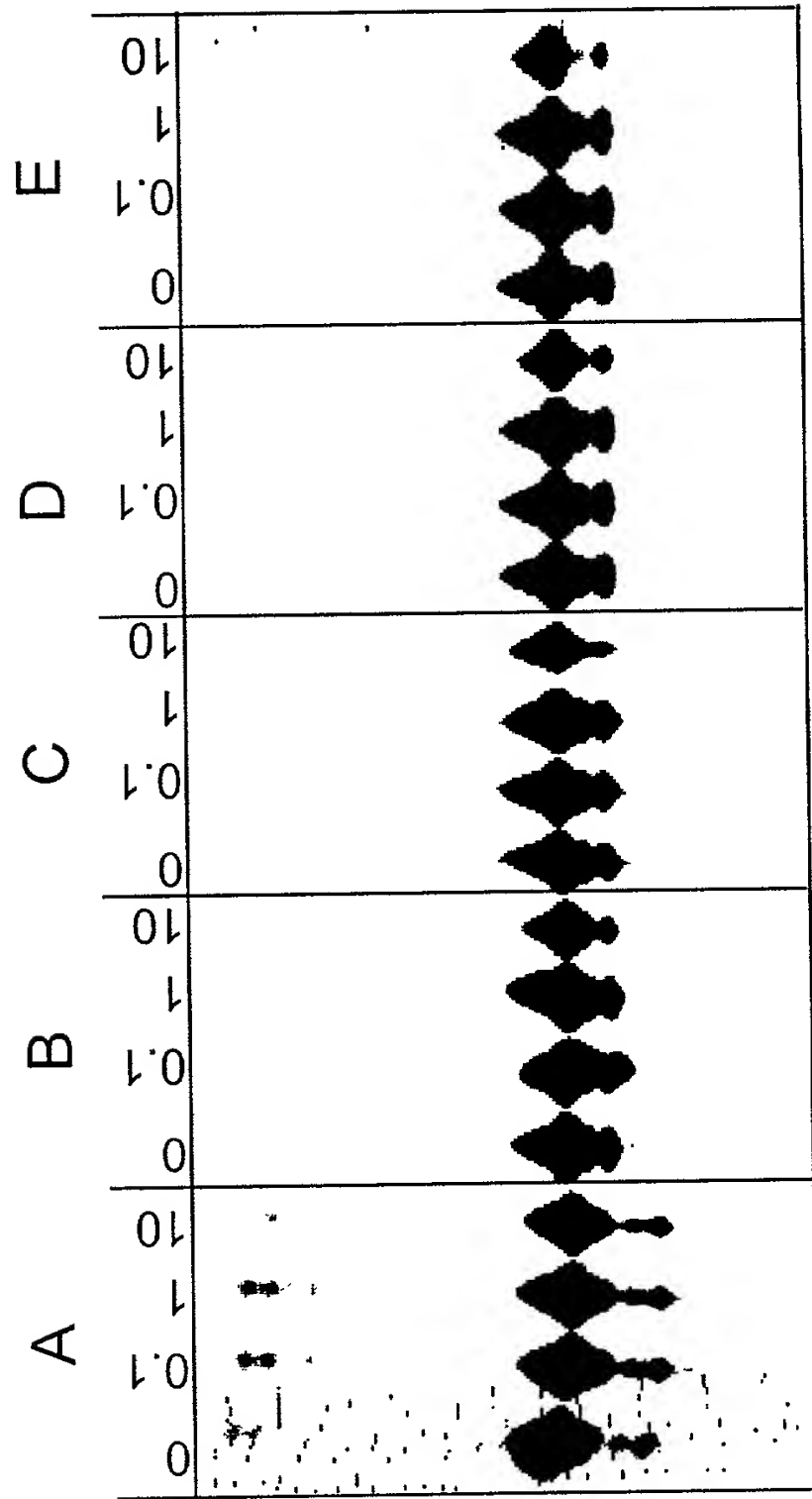


FIGURE 24B

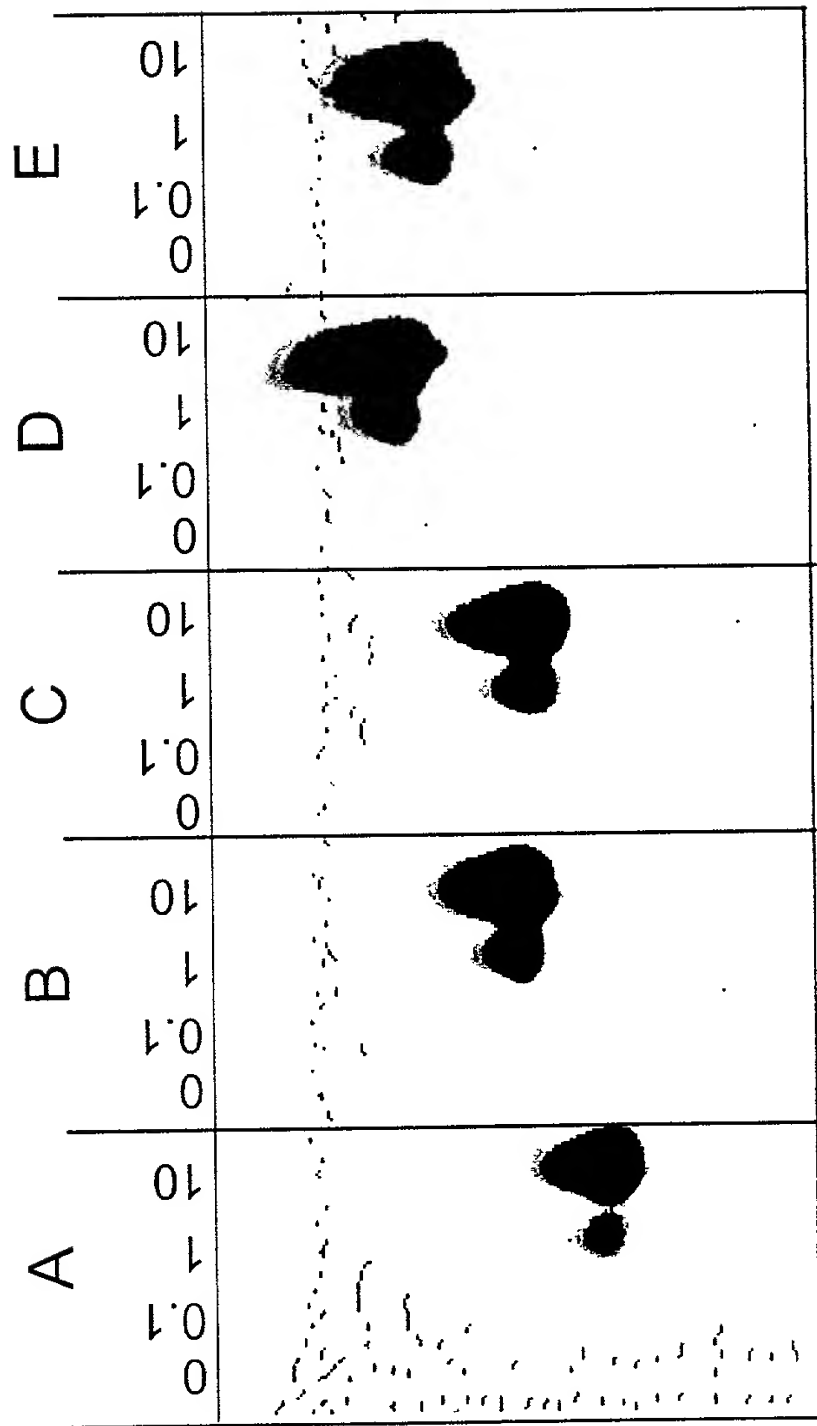


FIGURE 25

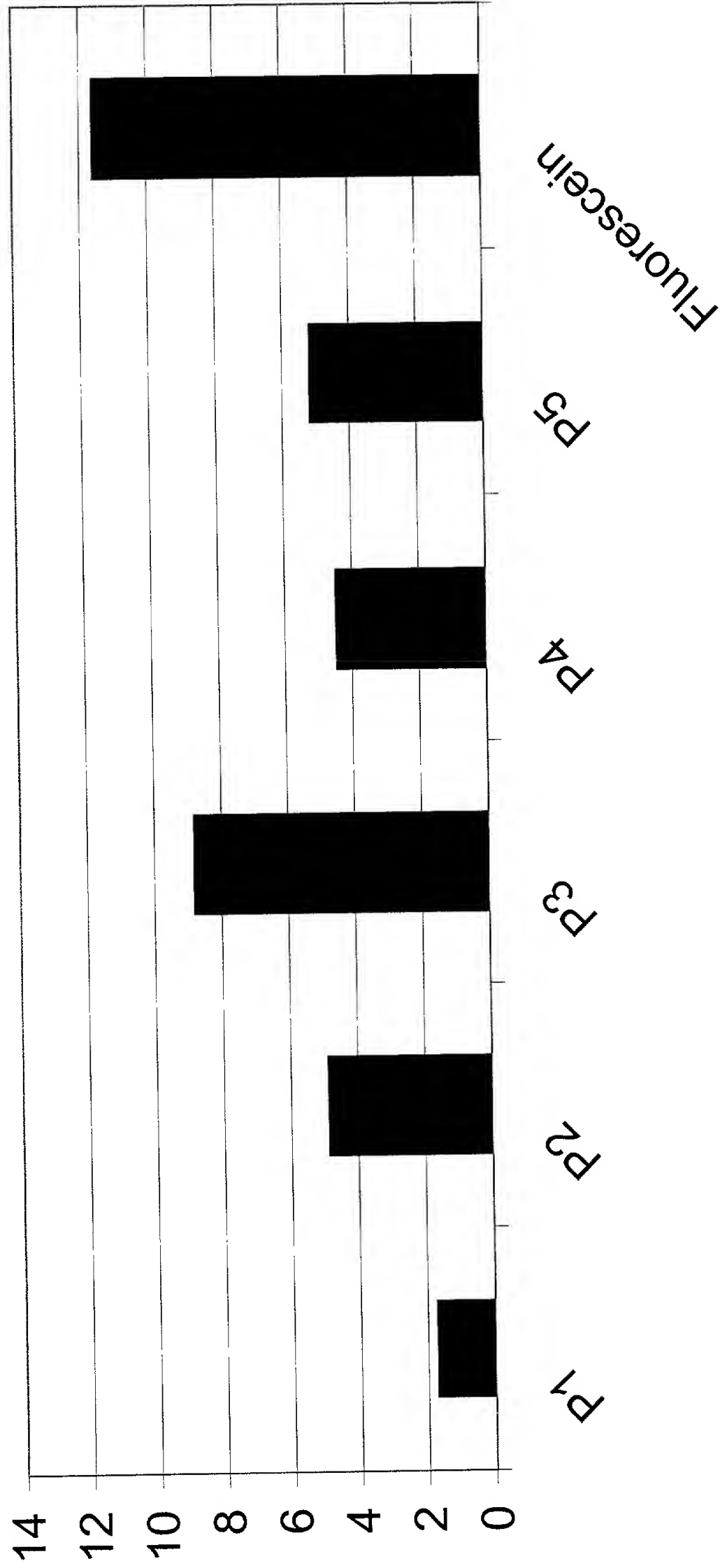


FIGURE 26A

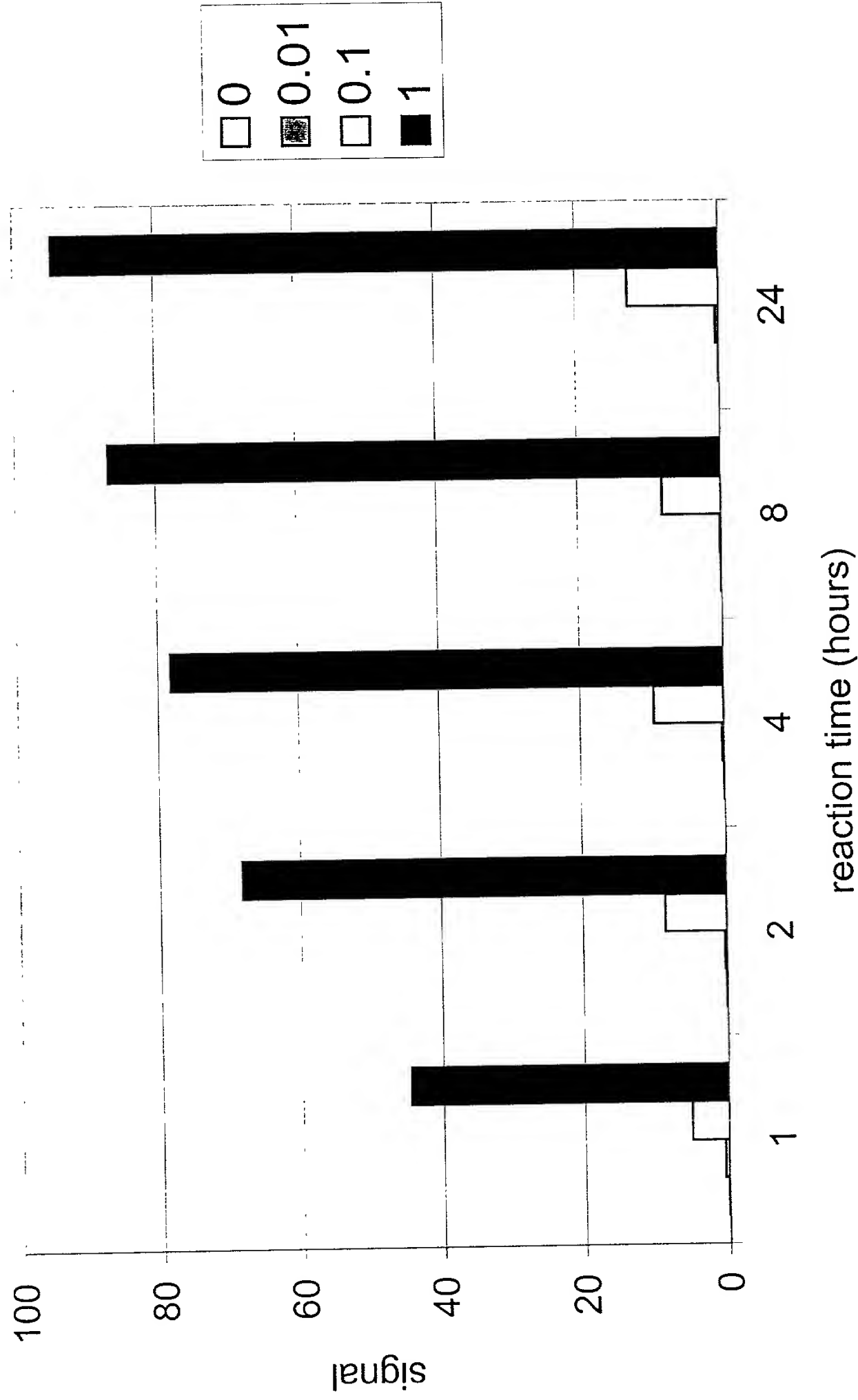


FIGURE 26B

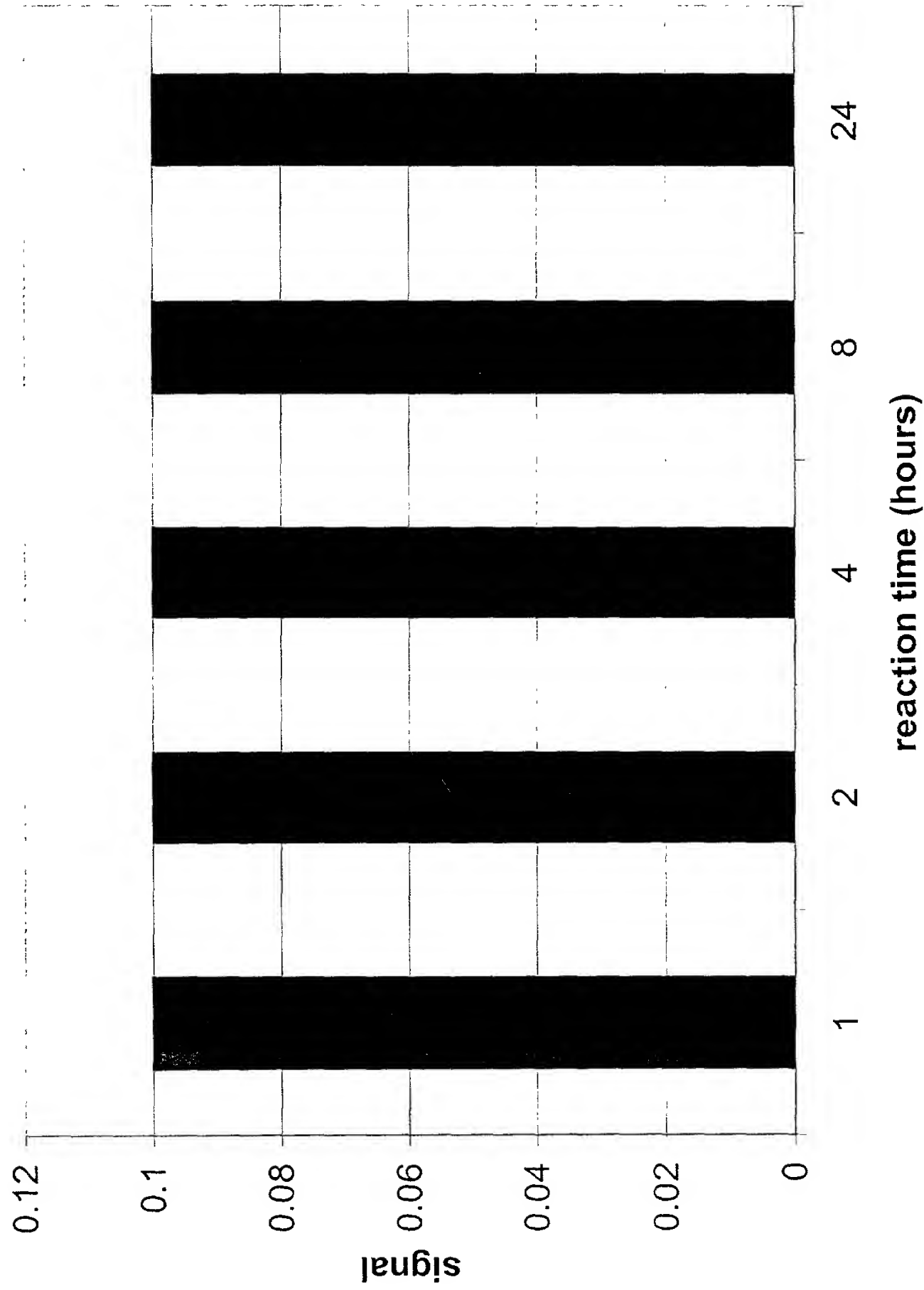


FIGURE 27

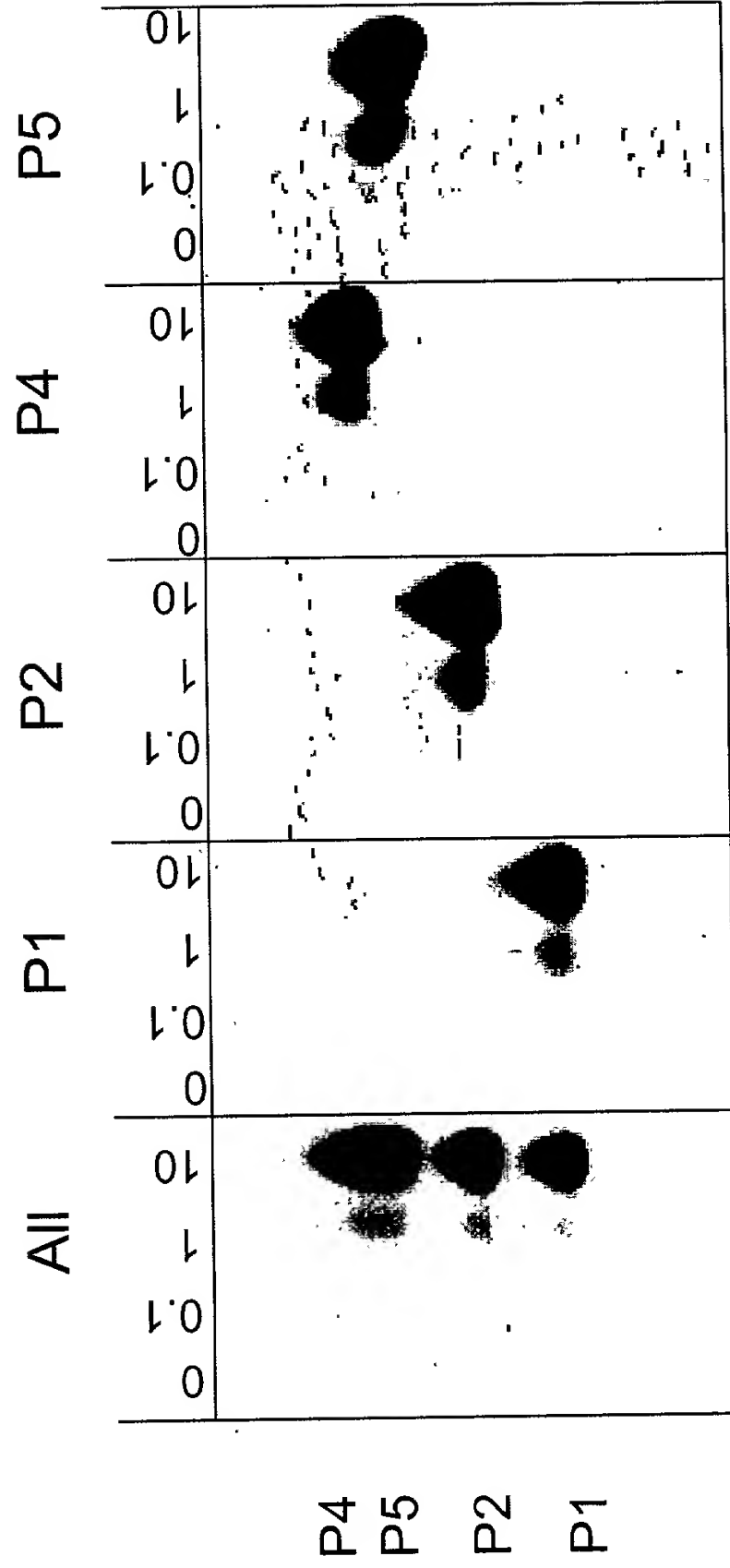
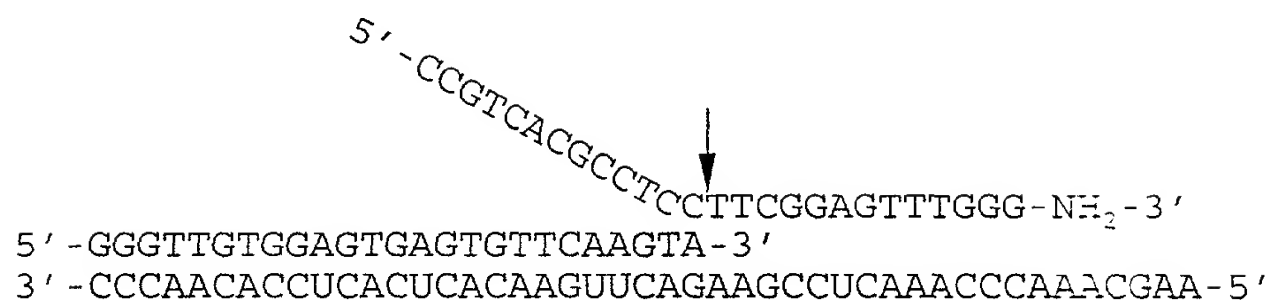
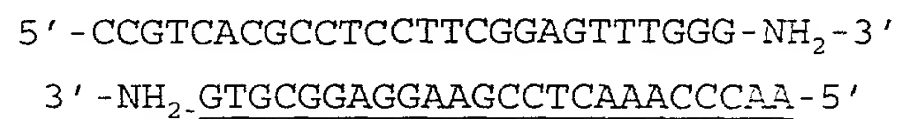


FIGURE 28A

Primary reaction



Human MCP-1 mRNA



Secondary reaction

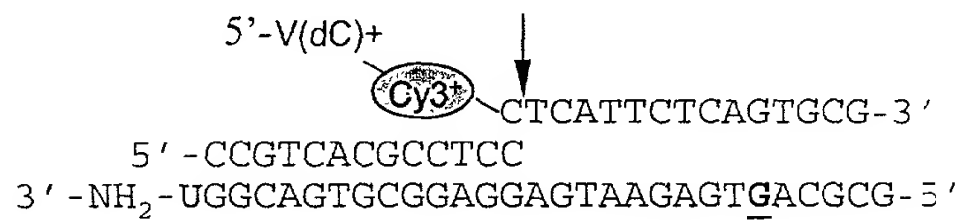
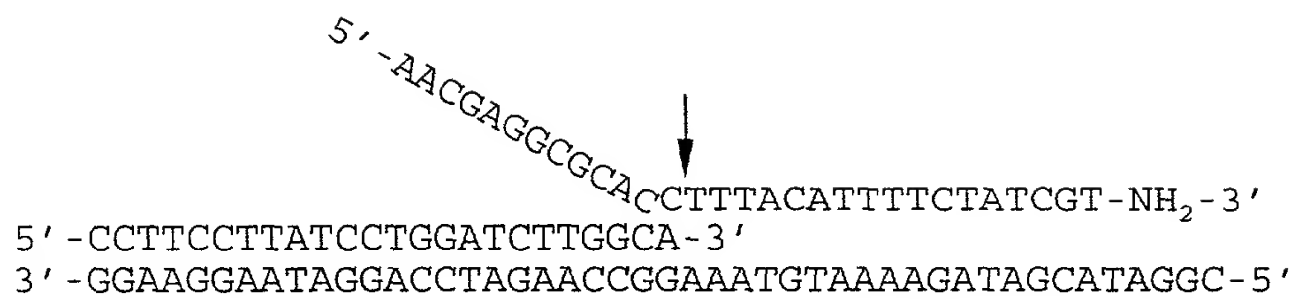
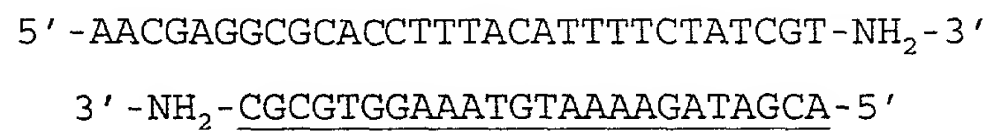


FIGURE 28B

Primary reaction



Human Ubiquitin mRNA



Secondary reaction

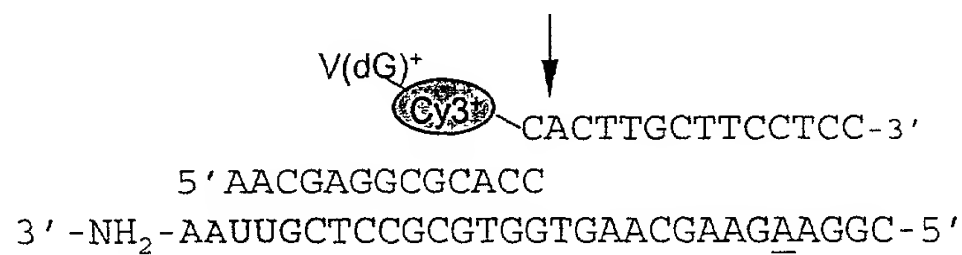


FIGURE 29

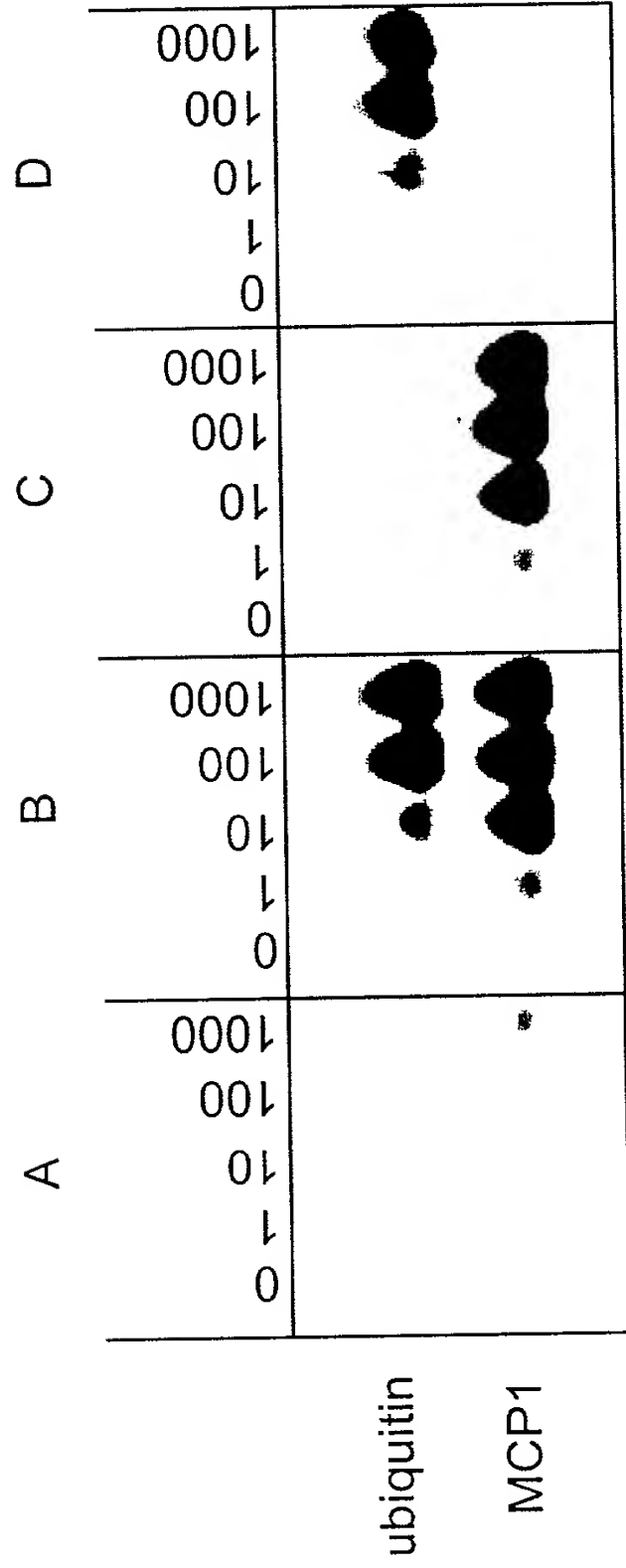


FIGURE 30A

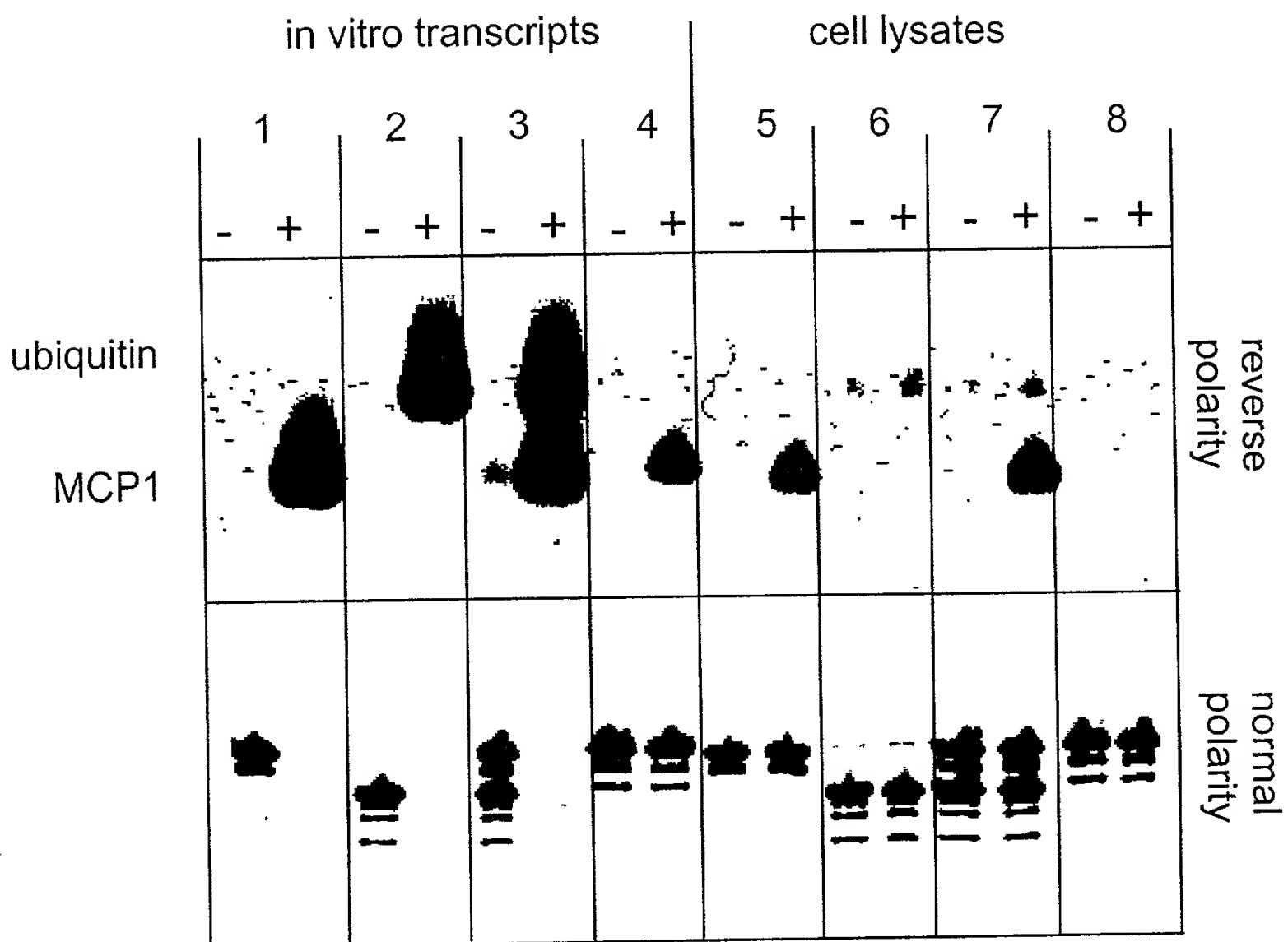
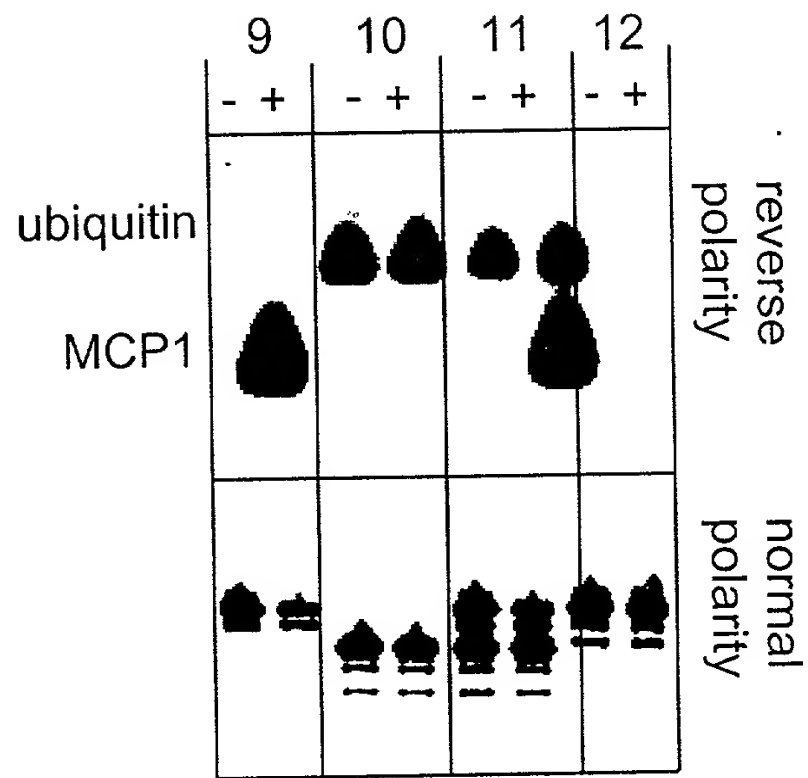


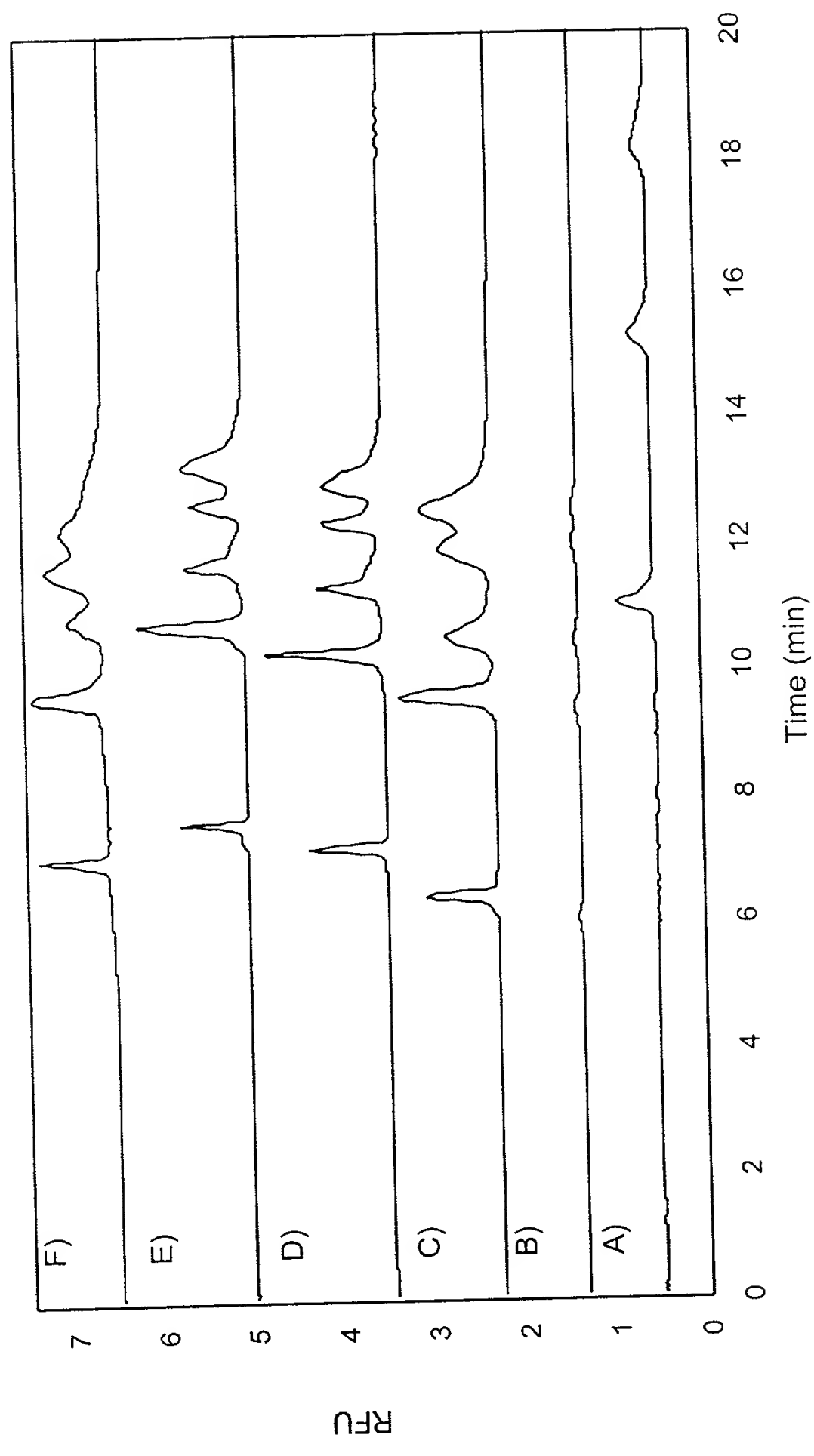
FIGURE 30B



26/46

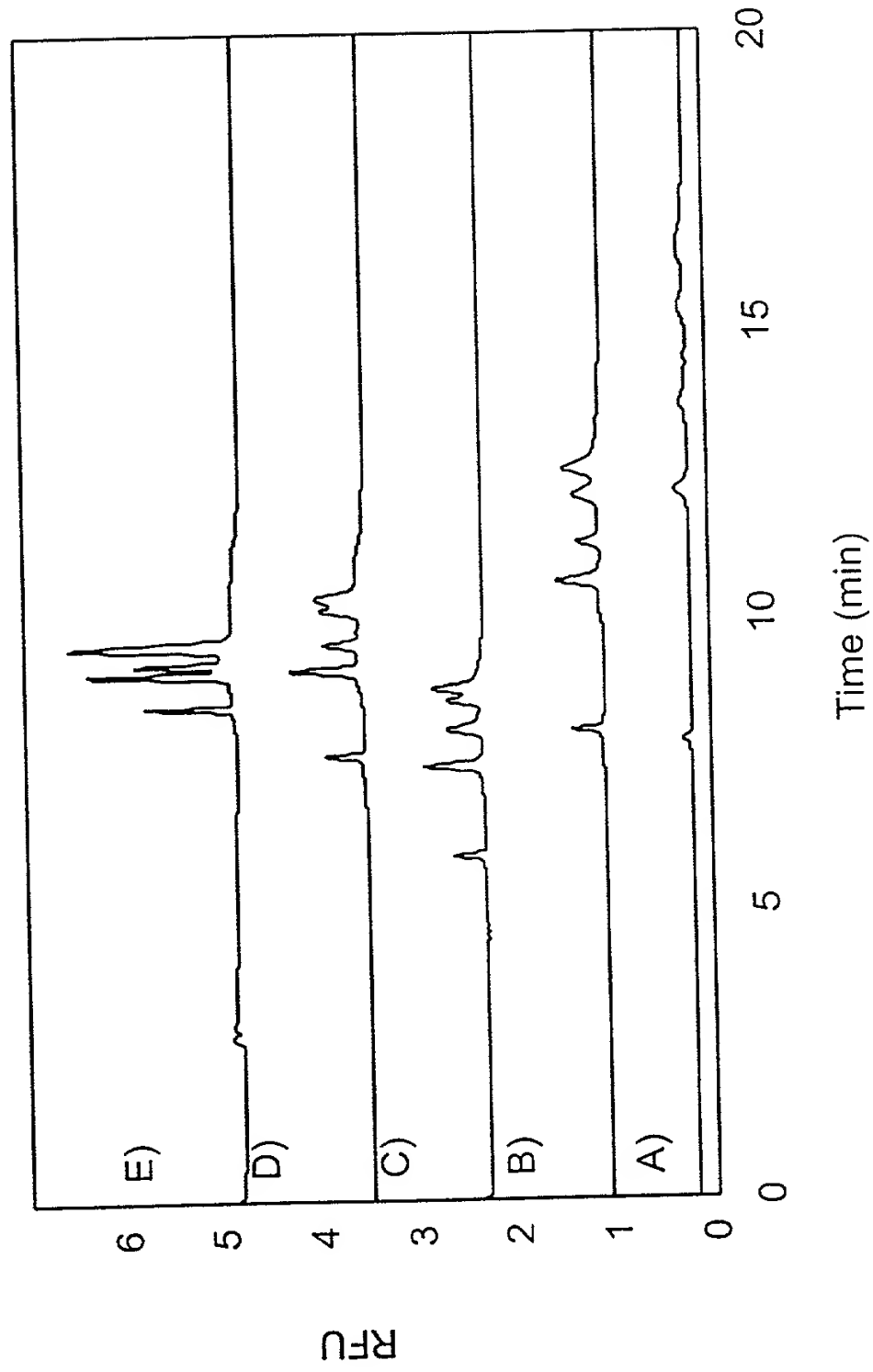
Figure 31 shows the results of the HPLC analysis of the sample. The chromatogram displays six distinct peaks labeled A through F, corresponding to different components of the sample. The x-axis represents Time (min) from 0 to 20, and the y-axis represents RFU (Relative Fluorescence Units) from 0 to 7.

FIGURE 31



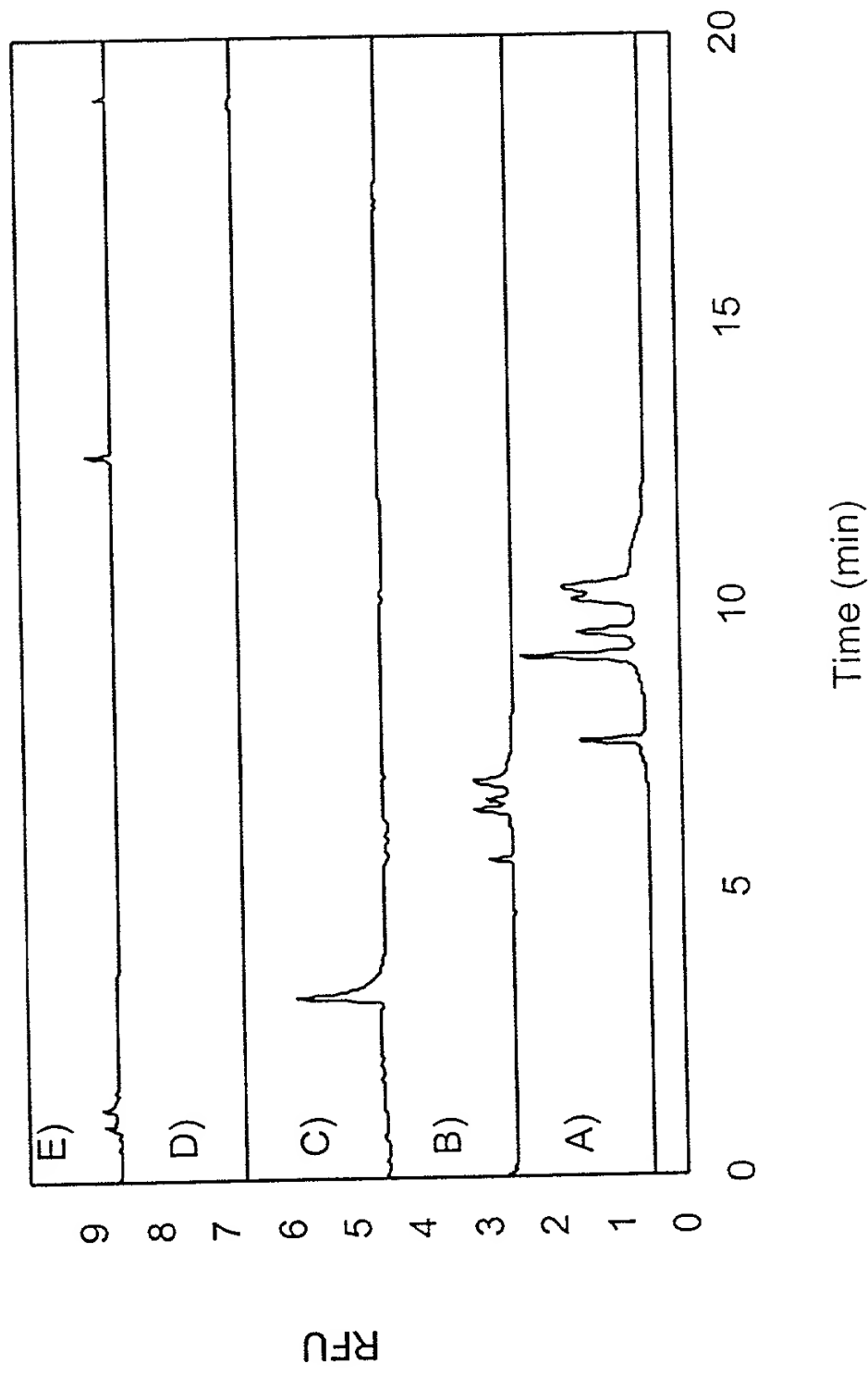
3746

FIGURE 32



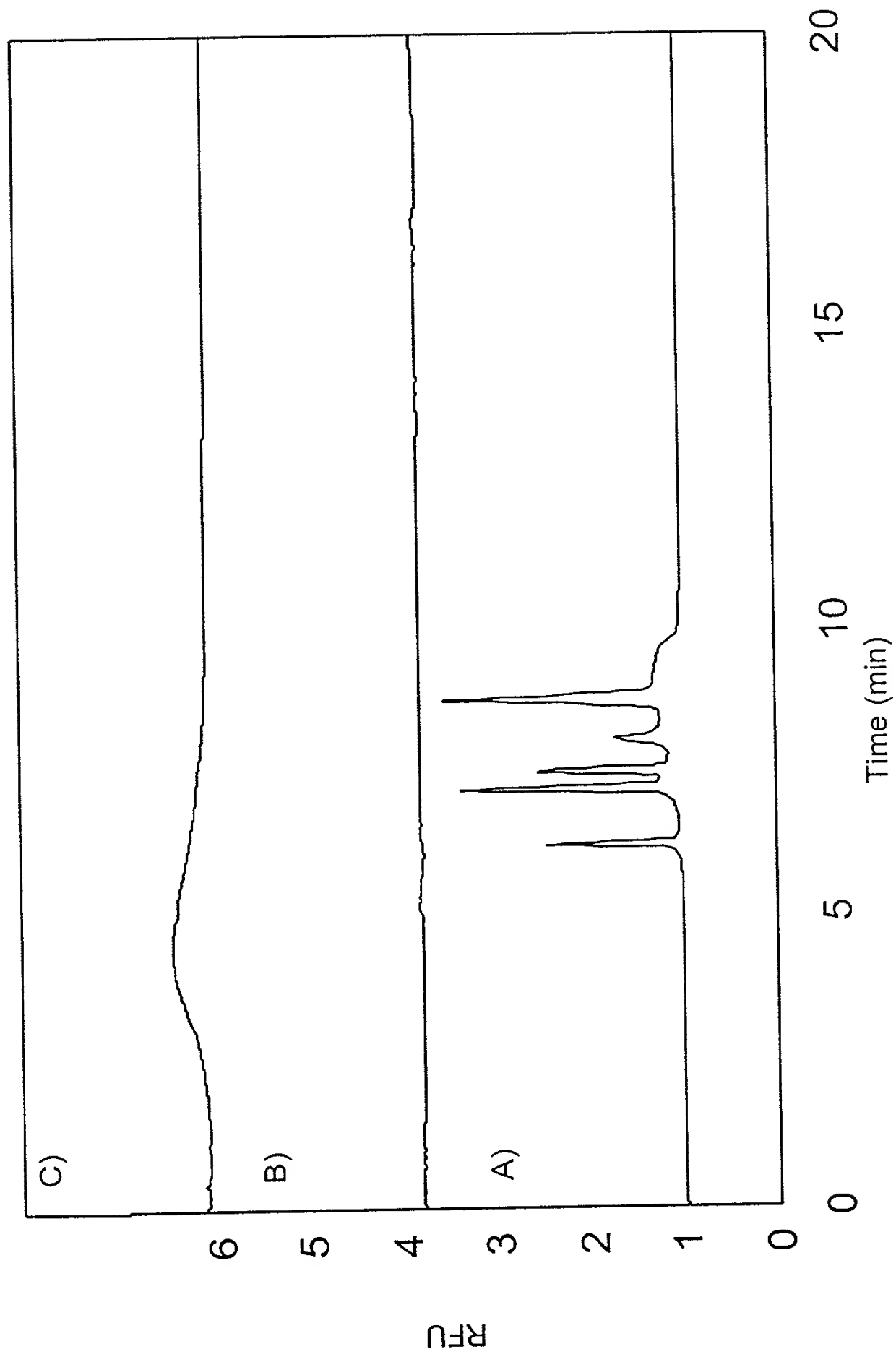
38/46

FIGURE 33



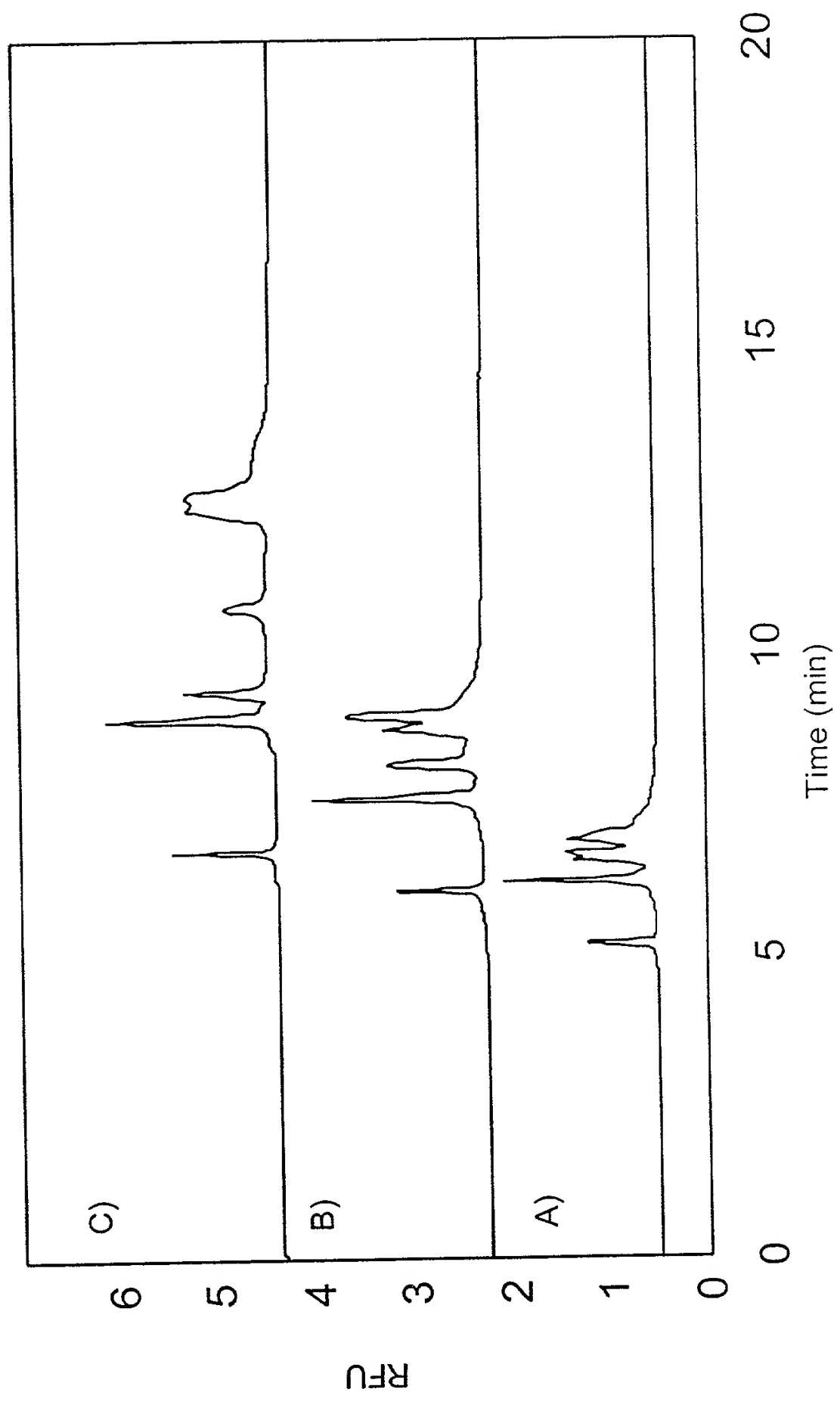
9h/bc

FIGURE 34



9/1/05

FIGURE 35



9h/1b

FIGURE 36

